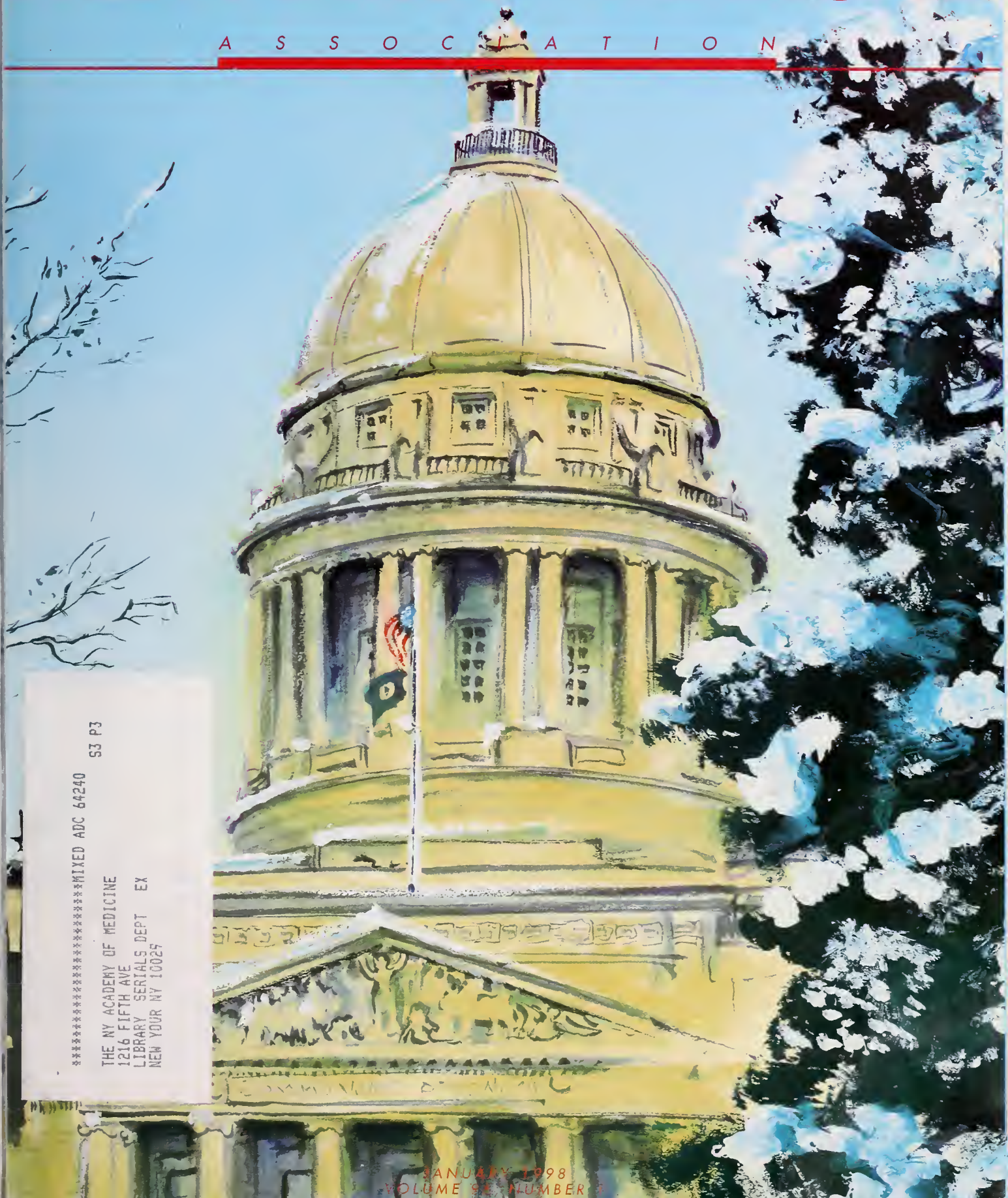
JOURNAL OF THE

KENTUCKY MEDICAL

ASSOCIATION

1998 Legislative Handbook Enclosed



JANUARY 1998
VOLUME 95 NUMBER 1

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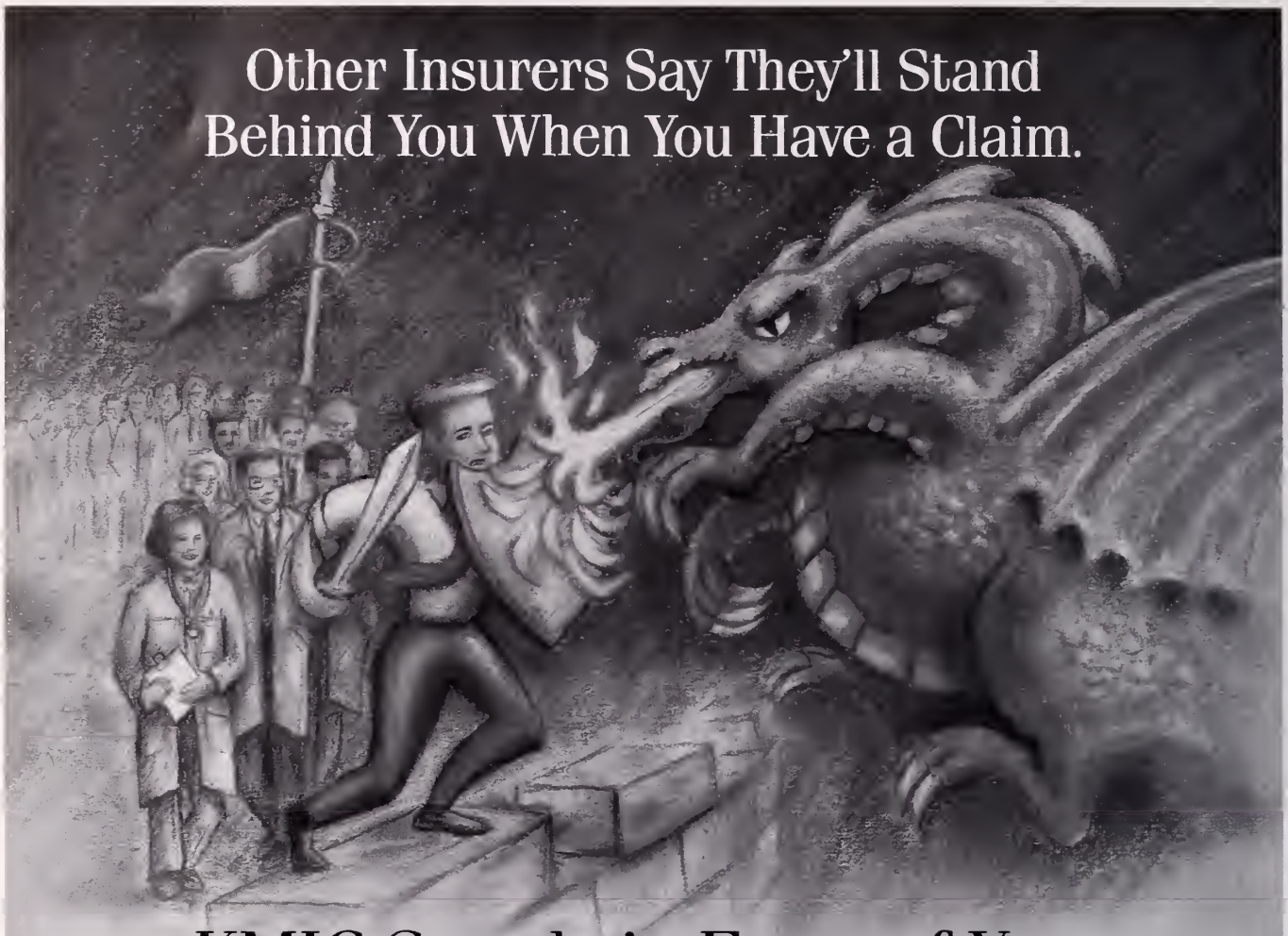

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Kentucky Medical Association
4965 US Hwy 42, Suite 2000
Louisville, KY 40222-6301

502.426.6200; Fax 502.426.6877

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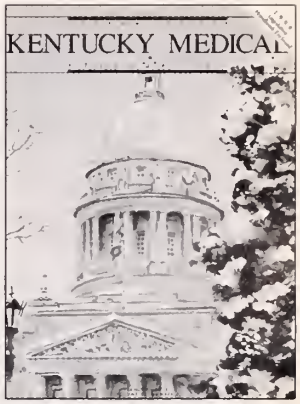

COVER:
Kentucky's Capitol is one of the handsomest statehouses in America. It is magnificent in totol effect yet ploin ond classic in its lines. Visitors will note much French influence in the building. The rotunda ond interior of the dome, ond the lontern ond dome exteriar, were capied fram the Hotel des Involides over Napoleon's tomb in Poris.

***Lee Wode of Eminence, Kentucky hos vividly coptured the beauty of the Capitol an a blustery, snowy day, much like a day one might encounter when visiting Frankfart for the Legislotive Session. Ta familiorize you with the Generol Assembly priar ta your visit, enclosed with this issue is the* 1998 KMA Legislotive Handbook.**

Award Winning Publication of The Kentucky Medical Association

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EDITORIAL AND ADVERTISING: Contact Sue Tharp, JKMA, The KMA Building, 4965 US Hwy 42, Suite 2000, Louisville, KY 40222. Phone 502/426-6200; FAX 502/426-6877.

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Wally O. Montgomery, MD
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What Will Be Your Priorities This Winter?

Wally O. Montgomery, MD

As you read this article, the Kentucky General Assembly will be in session and many bills will have been introduced. Leadership of the Senate and House have reappointed several committees which appear to be more in accord with the Democrat-Republican ratio. Committees are meeting on a daily basis. However, few bills will have been discussed, and nothing of significance passed. Action rarely occurs until the candidate filing deadline for 100 Representatives' seats and 19 of 36 Senators' positions is past, which occurs later this month. Whether or not a legislator has serious opposition can be a determining factor as to how they react to legislative proposals.

Since the 1996 Session, we have had Special Sessions on Worker's Comp, Education Reform, and Health Insurance Reform. Health Insurance Reform was the only legislation that failed to pass. It is my prediction that health insurance legislation, similar to bills introduced during the Special Session, will be reintroduced, debated throughout the Session, but not voted on until late March. Don't be surprised if this is the last bill voted on — the last night of the Session.

Kentucky Medical Association's primary agenda includes reintroducing the patient protection provisions with hope and anticipation that they will be passed. During the Special Session, we found little opposition to patient protection measures formulated over a period of years on the AMA as well as the KMA level. Patient Protection has been considered on many occasions by the KMA House of Delegates.

Once again, we will see many legislative proposals introduced related to health, safety, substance abuse and domestic violence. Tort reform will continue to be a priority for KMA this session. Unfortunately, we do not anticipate passage of any legislation of any significant benefit to physicians. However, we will continue our efforts in this area.

Be assured, though, that non-physician providers will be back at the trough trying to enhance their practice acts and mandate insurance coverage for treating our patients. Whether they are capable or trained to perform such care is always secondary when it can be obtained through "legislative fiat." Being cognitive of their efforts is a never ending task for KMA.

Many other bills will be introduced. In fact, I would be surprised if we do not have at least 200 bills which relate to the practice of medicine. Our lobbyists and the Quick Action Committee will be carefully reading these bills, and developing positions that adhere to House of Delegates directives.

Now back to the original question. What do you plan to be doing this winter? Later this month, on the 28th of January, KMA will sponsor a Legislative Conference in Frankfort at the Capital Plaza Hotel. Registration, materials, and meals are free to members and spouses, provided you pre-register. We have invited the Governor, Secretary of CHS, Insurance Commissioner, and leadership of the General Assembly to speak. I invite each of you to attend. It is always encouraging to those of us who find ourselves in Frankfort on a weekly basis to have other physicians visit Frankfort, taking part in talking to their Senators and Representatives, and learning about the legislative process. Please join us and make the trip to Frankfort. Play your part in making this a successful session of the Kentucky General Assembly.

Wally O. Montgomery, MD, FACS
Chair, State Legislative Committee

1998 KMA LEGISLATIVE SEMINAR
JANUARY 28, 1998
CAPITAL PLAZA HOTEL
FRANKFORT, KENTUCKY

C. Kenneth Peters, MD, President, Presiding

8:00 to 8:30	Continental Breakfast
8:30 to 9:00	Governor Paul E. Patton *State of the Commonwealth*
	Donald R. Stephens, MD, President-Elect, Presiding
9:00 to 9:20	Senator Dan Kelly, Senate Minority Floor Leader *The 1998 Session - The Minority Party Perspective*
9:20 to 9:40	Representative Jody Richards, Speaker of the House *The 1998 Session - The Speaker's Perspective*
9:40 to 10:00	Senator Larry L. Saunders, President of the Senate *The 1998 Session-The President's Perspective*
10:00 to 10:15	BREAK
	William P. VonderHaar, MD, Secretary-Treasurer, Presiding
10:15 to 10:45	Mr. George Nichols, Commissioner, Department of Insurance *Health Insurance Reform*
10:45 to 11:00	Representative Bob M. DeWeese, MD *Health Care Legislative Priorities in 1998*
11:00 to 11:15	William B. Monnig, MD, KEMPAC Chairman *Political Realities*
11:15 to 11:45	Wally O. Montgomery, MD Chair, Committee on State Legislative Activities *KMA's Legislative Agenda*
11:45 to 12:00	Mrs. Angie DeWeese, Vice President, KMAA *Alliance Priorities and Programs for the 1998 Session*
	J. Gregory Cooper, MD, Chair, Board of Trustees, Presiding
12:00 to 12:30	LUNCH
12:30 to 1:00	Mr. John H. Morse Secretary, Cabinet for Health Services *Medicaid Partnerships, CON, and Health Departments*
1:00 to 1:10	Preston P. Nunnelley, MD Vice Chair, Committee on State Legislative Activities *Lobbying Is A Contact Sport*

REGISTRATION IS FREE FOR PHYSICIANS, SPOUSES, AND OFFICE STAFF. HOWEVER, YOU MUST PRE-REGISTER BY CALLING (502) 426-6200.

NEWS FOR KENTUCKY PHYSICIANS
THE 1998 MEDICARE PHYSICIAN FEE SCHEDULE

On October 31, 1997, the Health Care Financing Administration (HCFA) published in the *Federal Register* the 1998 Medicare Fee Schedule (MFS) for physician services. This final rule indicates HCFA's decisions on policies described in its proposed rule of June 18, 1997, provides implementing regulations for Balanced Budget Act (BBA) provisions, and proposes interim relative values for new and revised CPT codes for 1998. Comments on the rule are due by December 30, 1997. The 1998 MFS is effective January 1, 1998. Highlights of the rule are as follows:

Conversion Factor: The BBA establishes a single conversion factor effective in 1998, replacing the previous three conversion factors. The 1998 single conversion factor will be $36.69, which provides an increase of 8.4% for the 54% of Medicare services that were previously on the non-surgery, non-primary care conversion factor. The conversion factor represents a 2.6% increase from the 1997 primary care conversion factor and a 10.4% decrease from the surgery conversion factor.

Specialty Impacts: Specialty impacts for 1998 are driven by a combination of the conversion factor and relative value changes, and reflect the average mix of services each specialty provides. lmpacts on surgical specialties range from an increase for otolaryngology of 0.5% to a decrease of 8.8% for cardiac surgeons, with general surgery at −2.3% and plastic surgery at −5.3%. Family physicians will see increases of 6.4%, gastroenterologists' payments will increase 7.1%, and diagnostic radiology payments will increase 8.2%.

Global Surgery: The AMA/Specialty Society RVS Update Committee (RUC) recommended that the physician work relative values for postoperative hospital and office visits be increased to reflect the increases for individually reported visit services from the 5-year review. The final rule implements the RUC's recommendation, providing 4%–7% increases in the work values for most surgical procedures.

RUC Recommendations: HCFA has accepted a record 96% of the RUC's recommendations on the work values for 208 new and revised codes for 1998. Coding changes addressed by the RUC include new codes for hip arthroscopy, laparoscopic surgery, and discharge day management, and revisions in the home visit codes.

Practice Expense Notice and Comment: Responding to the BBA provisions and the AMA's call for more opportunity for public comment on resource-based practice expenses. HCFA has published a notice with a 60-day comment period seeking information on: generally accepted cost accounting principles, cost accounting studies of physician practices or specialties, equipment utilization and prices, indirect costs, site-of-service assumptions, use of physician-employed staff in hospitals, and the refinement process to be used during each of the 4 years of the transition. The notice is in line with BBA requirements advocated by the AMA that HCFA use data on physicians actual practice expenses to develop the new resource-based practice expense relative values.

1998 Practice Expense Adjustment: The rule explains the BBA provision for a special adjustment to the practice expense relative values for 1998. Final HCFA calculations of the "down-payment" effects found that reducing the ratio of practice expense to physician work values to no more than 110% would reduce payments for procedures by $330 million and provide an increase in the practice expense values for office visits of 13%.

Multiple Procedure Rules: HCFA's June practice expense proposal had included a policy change that would extend to office services the payment reductions for multiple procedures that are currently applied to surgical procedures. The AMA and many specialties had strongly opposed this change. HCFA has deferred consideration of this issue along with the other practice expense issues, so the multiple procedure policy is not being implemented in 1998.

Actual Charges: The AMA and many specialties had also strongly opposed HCFA's proposal to establish payments in certain circumstances at the lessor of the MFS amount or the

lower amount that physicians had agreed to accept in contracts with non-Medicare payers, with this lower amount redefined to be the physician's "actual charge." The final rule withdraws this proposal from its scheduled 1998 implementation, but indicates that HCFA still believes the underlying principle is correct, suggesting advocacy efforts on this issue must continue. The AMA is also addressing a similar proposal referencing "usual" rather than "actual" charges which has been issued by the Inspector General.

Preventive Medicine Services: Effective January 1, 1998, the BBA provides Medicare coverage of colorectal cancer screening, cervical and vaginal cancer screening, bone mass measurement (effective July 1998), and diabetes self-management training. The rule describes HCFA's consultation with a physician panel convened by the AMA and the regulations on coding, payment, indicators of high risk, covered screening tests, and frequency of screening are generally consistent with this panel's suggestions. Although the rule notes the importance of preventive counseling in conjunction with preventive screening; however, it provides no guidance on coding and payment for such counseling.

Diagnostic Tests: HCFA had proposed establishing three levels of physician supervision of diagnostic tests — general, direct, and personal — indicating a range of attention required by the physician, from providing overall direction and control without necessarily being present up to being physically present in the room where the test is being done throughout the performance of the test. The AMA had questioned the rationale for this proposal and commented that unless HCFA clearly informed physicians which level of supervision was required for each type of test, this rule could lead to a situation similar to the physicians at teaching hospitals (PATH) audits. The final rule significantly clarifies the reasons for the supervision requirements and provides a list showing the level of supervision required for the technical component of each diagnostic test.

GPCI Update: HCFA is required to update the geographic practice cost indices (GPCIs) every three years and the rule provides the updated GPCIs for 1998-2000. An AMA analysis found the new GPCIs change very little, although they do incorporate more recent data on professional liability insurance premium and rental costs.

1998 SGR: The BBA established a sustainable growth rate (SGR) system to control Medicare expenditure growth, which replaces the previous Medicare Volume Performance Standard (MVPS). Our initial impression is that HCFA's establishment of the 1998 SGR at 1.5% is a significant improvement over what the 1998 MVPS likely would have been. A more complete AMA analysis of the SGR became available in December.

This information was provided by the American Medical Association.

It's time to reform Medicare. But please...

Be fair about it.

We all recognize the need to bring Medicare spending under control.

But what's the fairest way to do it?

Some people in Congress are advocating deep cuts in reimbursements to physicians. That's one way to cut costs. But is it fair? And, more importantly, will it really reform Medicare?

Some very influential voices in government and the press don't think so. Here's a sampling of what they say:

> **Congressional Budget Office:** In a 1996 report on deficit reduction, the CBO warned that with across-the-board cutting in Medicare, some beneficiaries "*...might find that they no longer had access to some medical services in the traditional fee for service sector.*"
>
> **The New York Times:** In an editorial, the *Times* criticized policy makers who "*...pretend that physician reimbursements can be cut without affecting health care – as if both doctors and hospitals can be slammed without hurting anyone except the providers of care.*"
>
> **Physician Payment Review Commission:** In its annual report to Congress, PPRC said the current Medicare reimbursement formula for physicians "*...will set increasingly unrealistic target rates of expenditure growth....*"
>
> Physician cuts alone will not do the job. And the cuts that are currently proposed would actually hurt physicians by rolling back reimbursements so far that they don't even match inflation growth.

That's not fair. It's not fair to physicians, and it's not fair to patients, who ultimately pay the price under such drastic cuts.

What we need is real reform. Real reforms will offset the need for deep, unfair cuts to physicians. The American Medical Association has a plan for reform that offers fiscal stability, expanded choices for patients, a new system of funding graduate medical education, and, above all, fairness.

To learn more about our plan, call 1-888-AMA-1997.

TODAY'S AMA
Giving Power To Your Voice

Gelatinous Transformation of Bone Marrow

Alan Shultz, MD; Lung T. Yam, MD

From the Veterans Affairs Medical Center, Louisville, KY. *Supported in part by the office of Research and Development of the Department of Veterans Affairs, Washington, DC.*

We present herein a patient with multiple medical illnesses, marked weight loss, and chronic anemia. Cytologic studies of his bone marrow revealed hypocellularity and gelatinous transformation (GTBM). The latter is a disorder of the hematopoietic system commonly occurring in chronically ill patients and is associated with various hematologic abnormalities. The etiology of GTBM is uncertain. Patients with this disorder may have associated medical problems but malnutrition seems to play a role. Review of the literature implies a significant associated morbidity and mortality, and a possible reversal of gelatinous changes with intense nutritional support. An otherwise dismal prognosis may be avoided by prompt diagnosis of this disorder and intensive nutritional support.

Gelatinous transformation of the bone marrow (GTBM) is a recognized, albeit a poorly understood, disorder of the hematopoietic system. It has been associated with many diseases including anorexia nervosa[1] and intensive care unit patients.[2] Frequently there are cytopenias and a diminished granulocyte reserve.[2,3] The bone marrow is often hypoplastic with fat atrophy and accumulation of a gelatinous material which is rich in hyaluronic acid. To date, there are no accepted treatments for GTBM and its presence may signify poor prognosis. The etiology of GTBM is uncertain but malnutrition seems to play a role. Recognition of this disorder depends on clinical awareness of its existence and knowledge of its characteristic features. The clinical suspicion is confirmed by proper studies of the bone marrow. Herein we report a patient with the typical features of GTBM and describe the clinical characteristics and findings in the bone marrow.

Case Report

The patient is a 73-year-old white male admitted to the Veterans Affairs Medical Center in Louisville for evaluation of chronic anemia and possible intravenous iron therapy. He had a past medical history of a partial gastrectomy with Bilroth II, left hemicolectomy secondary to ischemic bowel, rheumatoid arthritis, vitamin B_{12} deficiency, and anemia of chronic disease. The patient complained of long-standing lethargy and weakness. In addition, he stated he was unable to tolerate oral iron therapy due to gastrointestinal upset. Physical examination showed that he was cachectic, weighed 90 lbs and was 71 inches tall. He exhibited bi-temporal wasting and general muscle atrophy. He had no signs of active synovitis, hepatosplenomegaly, or lymphadenopathy. Results of laboratory studies included an albumin of 3.3 g/dl, globulin of 3.1 g/dl, and cholesterol of 178 mg/dl. The remainder of his chemistries were normal. A complete blood count revealed a leukocyte count of 6,800/mm^3, hemoglobin of 7.0 g/dl with a mean corpuscular volume of 69.9, and mean corpuscular hemoglobin concentration of 30.7. The leukocyte differential and platelet counts were normal. The sternal aspirate had a "slimy" consistency and contained many marrow spicules. Microscopic examination of air-dried smears of the aspirate revealed marked hypocellularity of hematopoietic cells, fat atrophy, and accumulation of an amorphous, pink-staining, extracellular material. No stainable iron was present (Fig 1). The patient was treated with parenteral iron therapy, but refused any further work-up. He has been followed by his primary care physician since his discharge and repeat studies have shown a persistence of his anemia.

Discussion

Gelatinous transformation of the bone marrow is a cellular deficiency in the bone marrow characterized by the accumulation of a gelatinous material which is an acid mucopolysaccharide and is rich in hyaluronic acid. This disorder can be associated with many different diseases (Table 1).[1,2,4-9,12,13] Patients typically have chronic underlying

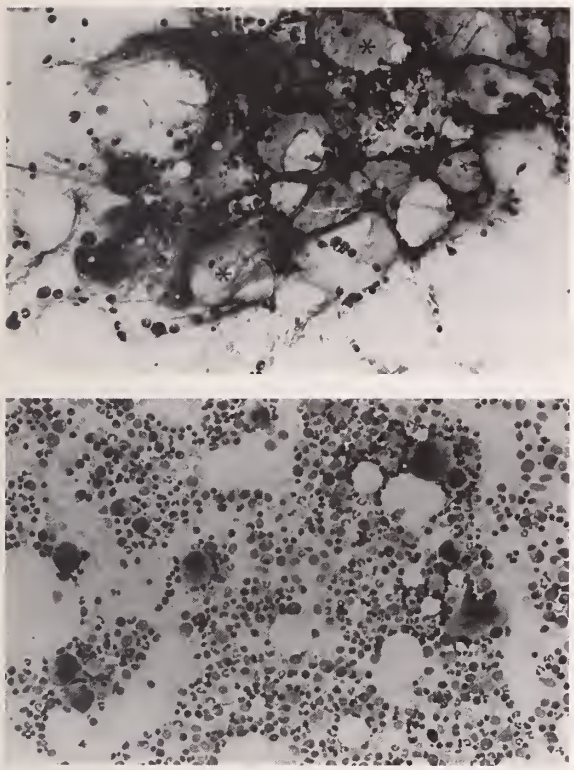

Fig 1 — A. Smears of marrow aspirate showing severe hypocellularity, atrophy of marrow fat and an accumulation of homogeneous, eosinophilic staining gelatinous material (asterisks). This material surrounds fat spaces and focally replaces hematopoietic elements. B. Smears of normal marrow aspirate showing normal cellularity, cell:fat ratio, and absence of gelatinous material. (Wright giemsa stain × 240)

medical conditions and a thorough history often reveals poor appetite and weight loss. They are markedly cachectic and ill-appearing. Laboratory studies may show a low cholesterol.[1] Often, hematologic abnormalities are present and represent the only laboratory abnormalities. The diagnosis is based on a clinical suspicion of its presence and confirmed by proper bone marrow studies.

The prevalence of GTBM is not known. There are multiple reports of its presence in anorexia nervosa.[1,6,7,12] It has been reported in 13 of 24 intensive care unit patients studied in one center,[2] nine out of 210 consecutive autopsies at the Veterans Hospital in Salt Lake City,[4] 29% of 75 patients with acquired immunodeficiency syndrome (AIDS),[5] and 3 of 30 systemic lupus erythematosus (SLE) patients with pancytopenia.[8] The etiology of GTBM is not completely understood. In one study, all affected patients had significant weight loss and were cachectic.[4] Interestingly, when such patients were matched with a control group with similar degrees of weight loss and cachexia, no GTBM was found in the control group.[4] Additional case reports describe this disorder in association with SLE[8] and leishmaniasis,[9] and in each patient a history of weight loss and decreased appetite was noted. Intense nutritional support in patients with anorexia nervosa and GTBM has been reported to reverse gelatinous changes.[7] These findings implicate a multifactorial etiology, yet the final common denominator appears to be malnutrition.

The clinical significance of GTBM is not known. As with our patient, cytopenias are often present. Anemia is the most common finding;[1] however diminished granulocyte reserve has been reported.[2,3] Patients with AIDS and GTBM have an increased prevalence of mycobacterium avium-intracellulare.[5] In Intensive Care Unit patients, persistence of hypocellularity on repeat bone marrow biopsy was associated with 100% mortality.[2] Certainly, an association with increased morbidity and mortality is implied. This may represent a diminished capacity to respond to blood loss or infection secondary to a limited bone marrow reserve. Ultimately, patients with this disorder are already compromised and an inability to respond adequately to stress may be fatal.

Table 1. Associated Diseases in Gelatinous Transformation of Bone Marrow

Neuropsychiatric
Anorexia Nervosa[1,6,7]
Obsessive Compulsive Disorder[4]
Parkinson's Disease[13]
Huntington's Chorea[4]
Endocrine/Metabolic
Graves Disease[12]
Hypothyroidism[12]
Chronic Renal Failure[12]
Infectious
Chronic Bronchitis[4]
Leishmoniasis[9]
Tuberculosis[12]
Acquired Immunodeficiency Syndrome[5]
Inflammatory
Systemic Lupus Erythematosus[8]
Ulcerative Colitis[12]
Others
Pernicious Anemia[4]
Critically Ill Patients (Intensive Care Unit)[2]
Malignancies[4]

Identifying patients with this disorder requires an index of suspicion based on clinical characteristics and a thorough cytologic examination of the marrow aspirate or histological assessment of the marrow biopsy. In smears of aspirate stained with Wright-Giemsa, the characteristic finding is the presence of amorphous, extracellular, pink-staining material surrounding fat spaces, or in more severe cases, replacing hematopoietic cells, as was the case in our patient. This substance has been recognized as acid mucopolysaccharide which is rich in hyaluronic acid.[4] Its presence is the *sine qua non* of GTBM. In sections of marrow biopsy stained with hematoxylin-eosin, the findings would include fat atrophy. The fat cells become smaller and the spaces between the fat cells are filled with a slightly homogeneous, eosinophilic substance. This material can be better visualized with Giemsa stain, Toluidine Blue or Alcian blue, or a Periodic Acid Schiff stain. The extent of marrow involvement can be assessed by nuclear bone scan or magnetic resonance imaging.[10]

In conclusion, GTBM is more common in chronically ill patients than previously thought. Its presence usually denotes significant nutritional deprivation. Although specific and universally effective treatment is presently unavailable, GTBM may be reversible in some patients. An otherwise dismal prognosis may be avoided by prompt diagnosis of this disorder and intensive nutritional support.

References

1. Mant MJ, Faragher BS. The hematology of anorexia nervosa. *Br J Haematol.* 1972;23:737-749.
2. Amos RJ, Deane M, Ferguson C, Jeffries G, Hinds CJ, Amess JAL. Observations on the haemopoietic response to critical illness. *J Clin Pathol.* 1990;43:850-856.
3. Pearson HA. Marrow hypoplasia in anorexia nervosa. *J Pediatr.* 1967;71:211-215.
4. Seaman JP, Kjeldsberg CR, Linker A. Gelatinous transformation of the bone marrow. *Hum Pathol.* 1978;9(6):685-692.
5. Mehta K, Gascon P, Robboy S. The gelatinous bone marrow (serous atrophy) in patients with acquired immunodeficiency syndrome. *Arch Pathol Lab Med.* 1992;116:504-508.
6. Bailly D, Lambin I, Garzon G, Parquet PJ. Bone marrow hypoplasia in anorexia nervosa: A case report. *Int J Eating Disorders.* 1994;16(1):97-100.
7. Steinberg SE, Nasraway S, Peterson L. Reversal of severe serous atrophy of the bone marrow in anorexia nervosa. *J Parenter Enteral Nutrition.* 1987;11(4):422-423.
8. Margaret HL, Edmund NG, Li K, Chi-Shun F. Gelatinous transformation of bone marrow in systemic lupus erythematosus. *J Rheumatol.* 1989;16:989-992.
9. Varma N, Bhoria U, Bambery P, Dash S. Gelatinous transformation of the bone marrow and *Leishmania donovani* infection. *J Trop Med Hyg.* 1991;94:310-312.
10. Vande Berg BC, Malghem J, Devuyst O, Maldague BE, Lambert MJ. Anorexia nervosa: Correlation between MR appearance of bone marrow and severity of disease. *Radiology.* 1994;93:859-864.
11. Savaga RA, Sipple C. Marrow myxedema. *Arch Pathol Lab Med.* 1987;111:375-377.
12. Tavassoli M, Eastlund T, Yam LT, Neiman RS. Gelatinous transformation of the bone marrow in prolonged self induced starvation. *Scan J Haemotol.* 1976;16:311-319.
13. Cornbleet PJ, Noir RC, Wolf PL. A histochemical study of bone marrow hypoplasia in anorexia nervosa. *Virchow Arch.* 1977;9:685-692.
14. Smith RRL, Spivak JL. Marrow cell necrosis in anorexia nervosa and unvoluntary starvation. *Br J Haemat.* 1985;60:525-530.

Anorexia and Failure to Grow Associated with Epstein-Barr Virus Infection

Michael W. Simon, MD, PhD

The Epstein-Barr virus is a common cause of contagious disease in childhood. It may produce fever and sore throat in young children and infectious mononucleosis in teenagers and young adults. This report discusses four cases of children with anorexia and poor weight gain due to Epstein-Barr virus infection.

Failure to grow is an important manifestation of childhood illness.[1] Organic and psychological disorders may produce failure to grow and anorexia. A brief loss of appetite may occur during any acute infection.[2] There may be a uniform refusal of all foods.[3] This may be severe enough to cause no or poor weight gain or actually produce weight loss.

The Epstein-Barr virus produces a variety of symptoms including fever and sore throat in young children, as well as infectious mononucleosis in teenagers and young adults.[4] It may be associated with apnea of infancy.[5] In this report the cases of four children with disinterest in eating and poor weight gain or weight loss associated with Epstein-Barr virus illness are discussed.

Case Reports

Case 1 — A 16-month-old white male in a state of good health presented with fever of 38.5°C, cough, sore throat, and runny nose. Physical examination showed a red throat with clear rhinitis, swollen cervical nodes, and thick post nasal drip. He was treated with Cefprozil and symptomatic measures. He returned 9 days later with no improvement, green nasal drainage, cough, fever, and a weight of 22 lbs and 8 oz. A CBC had a WBC of 7,300, HCT 38%, platelet 400,000, 55% neutrophils, 2% bands, 38% lymphocytes, 2% monocytes, and 3% eosinophils.

He continued the previous measures. Three days later he was reported to have disinterest in feeding and fever of 39.5°C. The symptomatic measures were continued. The following day he was reevaluated. The weight was noted to be 22 lbs 2½ oz and fever 39.5°C. He was playful and did not appear ill. Examination showed a red throat and cervical adenopathy. No changes were made in his management. An EBV profile was drawn and shown to be positive for convalescent stage illness with positive VCA-IgG and nuclear antigen antibody. His mother showed serologic evidence of previous EBV illness.

He seemed to slowly improve and feel better. One week later he had recurrence of fever of 39.5C and a convulsion. His weight was 23 lbs at that time. Examination revealed a red throat, post nasal drip, and injection to both tympanic membranes. A CBC had a WBC of 6,700, HCT 40%, and platelet count of 583,000. The differential had 64% neutrophils, 12% bands, 15% lymphocytes, and 9% monocytes. He received Rocephin 50 mg/kg IM. Within 2 days he was again improved. At return follow-up he was doing well and continues to thrive at his well child visits.

Case 2 — A 6-month-old white male presented with fever 39.5°C, and irritability. Examination showed exudative pharyngitis, upper airway congestion, and injection to the right tympanic membrane. He was treated with Erythromycin-Sulfisoxazole and Ibuprofen. The child was re-evaluated 2 weeks later and found to be irritable with a fever of 39°C. He was feeding poorly. Exam showed upper airway congestion, bilateral serous otitis, and purulent nasal drainage. His weight was reported at 15 lbs 6 oz. He was treated with Cefprozil. Three days later he was re-evaluated and his weight measured to be 15 lbs. He was found to

be irritable and not resting well. The family reported that the child was feeding poorly, taking only 3 ounces per feeding. He looked wasted with loss of subcutaneous fat. He was having one formed stool per day. The WBC was 13,300, HCT 36%, and platelet count was 173,000. The differential had 18% neutrophils, 2% monocytes, 75% lymphocytes, with 5% atypical lymphocytes noted. Over the next 2 week period he fed better and gained 8 oz. Then he dramatically cut back to a total of 16 oz a day. EBV profile was assayed and found to be negative. A repeat profile 10 days later was found to be positive for VCA IgM and VCA IgG. His mother had a negative serologic profile. The feeding slowly improved and the child gained weight over the next 2 month period. He continues to do well at routine well child follow-up.

Case 3 — A 5-month-old presented with poor feeding. He had an unremarkable prenatal and birth history. There were no family problems or stress reported. There was a documented 8 oz weight loss in the preceding 31 day period. He had lost interest in feeding and would take 15 oz of formula per day. The child had recurrent oral and diaper yeast infection. The infection poorly responded to Nystatin and Ketoconazole. Physical exam showed red throat with white cheesy material on the buccal mucosa and red confluent diaper rash with satellite lesions.

Hospital admission was coordinated for further treatment and to evaluate infant-mother interaction. A screening CBC had a WBC of 17,400, HCT 36%, and platelet count of 508,000. The differential had 10% neutrophils, 80% lymphocytes, 6% monocytes, 3% eosinophils, and 1% basophils. SMA 24 and urinalysis were normal. QIGs were normal for age. Urine metabolic screen for amino acids and organic acids was non-diagnostic. An EBV profile was positive for VCA IgG and EBV NA. These titers were negative for the mother. The infant was diagnosed with convalescent phase EBV illness.

He was discharged on calorie enhanced formula at 26 cal/oz. He has improved and his feeding and weight gain have placed him around the 50th%. No additional yeast problems have occurred. He continues to grow and develop well at routine follow-up.

Case 4 — A 10-week-old male presented with a several day history of not breastfeeding well. He had an unremarkable prenatal, birth, and neonatal course, having been born at 42 weeks of gestation and weighing 8 lbs 6 oz. The interim history had been normal. The family was healthy and no social changes had occurred since the infant's birth.

The day of presentation he had a normal examination. His weight was noted to be 12 lbs 8 oz. The mother was given supportive assistance. She was encouraged to continue breastfeeding and give supplemental formula. Two days later the child returned with progressively worse feeding. His weight was recorded at 12 lbs 7 oz. Examination showed his throat to be red with shotty cervical adenopathy. A CBC had a WBC of 12,700, HCT 32%, and platelet count of 210,000. The differential had 26% neutrophils, 1% bands, 59% lymphocytes, 9% eosinophils, and 5% atypical lymphocytes. He was placed on Acetaminophen and symptomatic measures. His weight was remeasured 3 days later and shown to be 12 lbs 6 oz. He demonstrated little interest in feeding. A repeat CBC had a WBC of 12,800, HCT was 30%, and platelet count was 175,000. The differential had 38% neutrophils, 2% bands, 46% lymphocytes, 5% monocytes, 2% eosinophils, and 4% atypical lymphocytes. The SMA 7 was normal. A sweat chloride was assayed with the result 30 (normal less than 55).

The child completely stopped feeding over the next 2 day period and was admitted to the hospital. Blood and urine cultures were collected and the child given IV fluids at a rate of 1500cc/m^2. After the third hospital day he began feeding better and was discharged home. The cultures were negative. His EBV profile was assayed and found positive for VCA IgG and EBV NA. His mother had positive titers for these antibodies, but at significantly lower levels. He was diagnosed with convalescing EBV illness and continues to do well at routine follow-up.

Discussion

Each child in this report had documented weight loss producing a transient growth failure.[6] This was the result of disinterest in feeding and inadequate calorie intake. Severe starvation and calorie deprivation in infancy may produce irreversible developmental deficits.[7] The children in this report have shown no developmental delay or additional growth problems.

The etiology in each case in this report, based on laboratory studies and physical examination, appears to be the Epstein-Barr virus. It is unclear from another report, but the Epstein-Barr virus may be a cause of anorexia, poor weight gain, and

weakness in children.[8] Other infections have been shown to interfere with normal growth. No family social problems were known to contribute to the growth failure of these children.

These children may have acquired EBV from either family or daycare contacts.[9] Cases 1 and 4 possibly acquired the virus from their mothers. These children had higher antibody titers than their mothers who were asymptomatic. The mothers may have been asymptomatic excreters of the Epstein-Barr virus. All the children had a short acute phase lasting several weeks. This may occur in young children.[10] Poor feeding may extend into the convalescent period.

Children who present with a disinterest in feeding accompanied by poor weight gain or weight loss, unremarkable history, a physical examination consistent with a viral infection and not seriously ill warrant screening for Epstein-Barr virus before receiving a full scale failure to thrive workup.

References

1. Shaheen E, Alexander D, Truskowsky M, et al. Failure to thrive—a retrospective profile. *Clin Pediatrics.* 1968;7:255-261.
2. Tunnessen WW Jr. Anorexia. In: *Signs and Symptoms in Pediatrics.* Philadelphia, PA: JB Lippincott Co; 1983.
3. Green M. Anorexia. In: *Green and Richmond. Pediatric Diagnosis. Interpretation of Symptoms and Signs in Different Age Periods.* Philadelphia, PA: WB Saunders Co; 1980.
4. Simon MW. Correlation between clinical, physical and laboratory features in children with EBV illness. *J KY Med Assoc.* 1993;91:504-508.
5. Simon MW. Apnea associated with Epstein-Barr virus infection. *Ped Infect Dis J.* 1994;13:82.
6. Collins J, Mezey AP. Failure to Thrive. In: Shelov SP, Mezey AP, Edelmann CM Jr, Barnett HL, eds. *Primary Pediatric Care. A Symptomatic Approach.* Norwalk, CT: Appleton-Century-Crofts; 1984.
7. Hertzig ME, Birch HG, Richardson SA, et al. Intellectual levels of school children severely malnourished during the first two years of life. *Pediatrics.* 1972;49:814.
8. Sumaya CV, Ench Y. Epstein-Barr virus infectious mononucleosis in children. I. Clinical and general laboratory findings. *Pediatrics.* 1985;75:1003-1010.
9. Simon MW. Intrafamilial spread of Epstein-Barr virus. *J KY Med Assoc.* 1995;93:453-455.
10. Simon MW. Apnea of infancy associated with Epstein-Barr virus infection. *J KY Med Assoc.* 1993;91:401-402.

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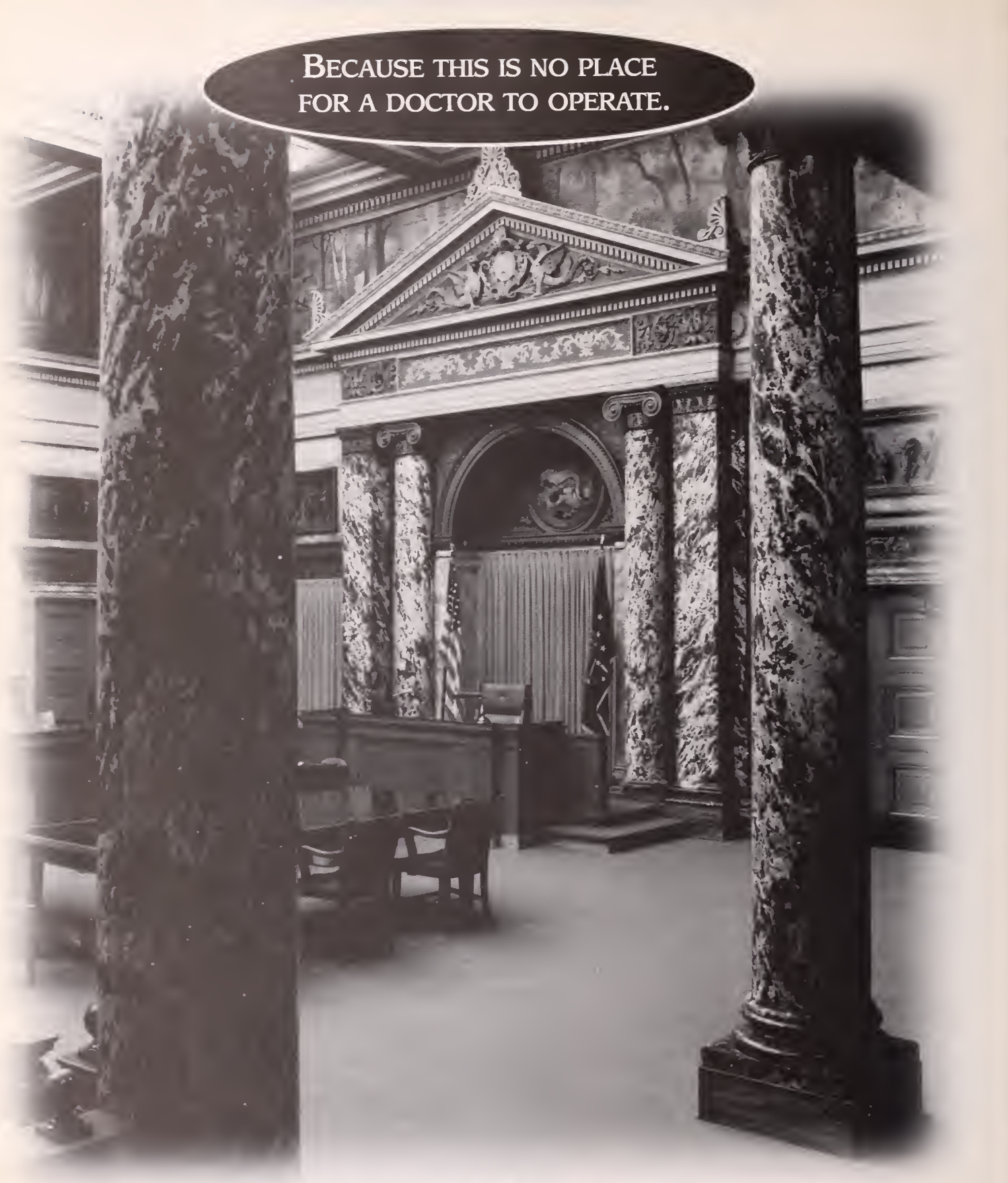

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Mobile Mammography Screening: The James Graham Brown Cancer Center Three Year Experience

Implications for Public and Professional Education

Michael B. Flynn, MD; Elizabeth A. Amin, MD; Robert C.G. Martin, II, MD

Objective: Review the mobile mammography screening experience at the James Graham Brown Cancer Center during a 3 year interval.
Methods: Collect and analyze demographic and outcome data on the screened population.
Results: 4,864 women underwent two-view mammograms. One third of the mammograms were performed in women over 50 years of age. 232 mammograms were carried out per cancer detected. The number of mammograms per cancer detected was 2.5 times higher and the number of biopsies per cancer detected was 2.8 times higher in women under 50 years of age. Two thirds of the cancers detected were in the over 50 age group which represents one third of the study population.
Conclusions: In this study, mammographic screening for breast cancer was more cost effective because a higher yield of cancers detected was obtained with fewer mammograms and fewer breast biopsies in women over 50 years of age, compared to women under 50 years. Resolving the question of the cost effectiveness of screening women aged 40 to 49, will require a large randomized prospective trial. In the near term, rather than to dwell on this issue, we would propose that this study suggests the need for greater emphasis in both public and professional education on breast cancer detection directed to women over 50 years of age.

The most controversial issue in the breast cancer screening debate involves breast cancer detection guidelines for women aged 40 to 49 years.[1-11] One side of this debate suggests that scientific data do not demonstrate a significant reduction in mortality from screening mammography in women under 50 years of age. The opposing view proposes that there is evidence that screening mammography for women younger than 50 will produce a modest reduction in mortality with the added advantage of the opportunity for more conservative therapy and is therefore justified. This study was carried out to review the experience of the James Graham Brown Cancer Center Mobile Breast Program in light of this controversy. The first mammograms performed were carried out at the Louisville Chamber of Commerce in April 1990. This study was initiated after operational start-up issues of this new program had been resolved and was conducted as part of an ongoing evaluation of the program. For the duration of the study, all mammograms were reviewed by the same radiologist (Dr Amin, a co-author), whose primary professional interest was the development and maintenance of the mammography program and who contributed a high level of expertise to this process.

From the Division of Surgicol Oncology, Department of Surgery, University of Louisville School of Medicine, Louisville, KY 40292; Women's Povilion Health & Resource Center, 351 S Floyd Street, Louisville, KY 40201; and James Graham Brown Concer Center, 529 South Jackson Street, Louisville, KY 40202.

Reprint requests ond correspondence to Department of Surgery, c/o Editoriol Office, University of Louisville, Louisville, KY 40292 (Dr Flynn). Phone 502/852-7870 Fox: 502/852-8031.

Materials and Methods

From August 1, 1990, to July 31, 1993, 4,864 women underwent two-view mammograms on the James Graham Brown Cancer Center mobile van. The reporting system used at that time contained four mammographic classifications: normal, probably benign, suspicious for cancer, and need more information.[12] Subjects for mammography originated from three sources; (1) screenings scheduled through the Kentucky State Health Departments as part of a state funded Cancer Control Program for medically indigent women, (2) women examined through corporate arrangements or sponsorships, and (3) women examined as a result of public availability of the mobile van. Mammography carried out through corporate arrangements included employees and/or relatives of employees of an assortment of business organizations in Kentucky. During public screenings, the mobile van was

Table 1. Criteria for Mammography

Age 35 or older*
Last mammogram 12 months ago or longer
No clinical complaints**
Name of a physician to do breast physical exam and to receive mammography report

*If a woman under the age of 35 made a special request for a baseline mammogram because of a family history of breast cancer, permission was given if she was 30 years or older;

**Mammography technologists were told not to turn away any woman who had a breast lump or any other complaint. These mammograms were not included in the screening group.

available at county fairs, the Kentucky State Fair, and other circumstances where mammography was provided on a walk-in basis.

Individuals requesting mammography were registered by the van personnel. A history was obtained and the mammogram was performed. The mammograms were processed and examined by the radiologist at a later date. Criteria for mammography used at that time are shown in Table 1. Evaluations did not include a breast physical examination. Observed frequency distributions are tested against the hypothesis of no relationship using the chi-square contingency test.

Table 2. Age Comparison

	Under 50 Years Old	Over 50 Years Old	Total
Mammograms	2,970	1,894	4,864
Additional Views	195	125	320
Breast Biopsies	55	35	90
Cancers Diagnosed	8	13	21
Ratio (Cancer/Mammograms)	1/371	1/145	1/232

Table 3. Mammographic Interpretation

	Mammograms	Additional Views	Biopsies	Cancer
Normal	4,192	86	4	1
Probably Benign	620	222	57	3
Suspicious for Cancer	32	8	26	17
Need More Information	20	4	3	0
TOTAL	4,864	320	90	21

Results

Comparison by age revealed almost two-thirds of the mammograms were performed in women under 50 years of age. No differences were noted in the proportion of additional views or biopsies relative to the total number of mammograms in the under 50 and over 50 age groups (Table 2). In women under 50 years of age, over twice as many breast biopsies were performed for each cancer diagnosed compared to women over 50 years.

The overall frequency of cancers detected to mammograms was 232 per cancer detected (Table 2). The ratio of mammograms performed per cancer detected was over 2.5 times higher in the under 50 age group ($P < 0.05$).

Mammographic Interpretation

Most of the diagnosed cancers were identified in the suspicious for cancer group (Table 3). The largest number of additional radiologic views and largest number of biopsies were in the probably benign category, resulting in identification of 14% (3/21) of the cancers; this group also had a low yield of cancers diagnosed. In comparison, a high yield of cancers diagnosed with relatively low utilization of additional views and a low biopsy to cancer ratio was found in the suspicious for cancer group. These observations were seen in both the under and over 50 age groups.

Breast Biopsies

Ninety biopsies were performed to identify 21 cancers for a ratio of 4.2 breast biopsies for each cancer diagnosed. In women over 50 years, 2.5 breast biopsies were performed to diagnose each cancer compared to 7 breast biopsies for each cancer in women under 50 years ($P < 0.05$).

Cancers Detected

Seventeen malignancies were diagnosed in 32 mammograms reported as suspicious for cancer for a 54% cancer detection rate compared to 0.4% cancer detection rate in the probably benign group and 0.002% in the normal category (Table 3). In this study, the overall sensitivity of the mammogram to detect cancer when it is present in this population of women is 0.81. The ability of the mammogram to correctly identify patients without disease (specificity) is 0.9969. Of the 15 mammograms categorized suspicious for cancer in women under 50 years of age, 7 cancers (46%) were detected compared to 10 cancers (58%)

detected in 17 mammograms read as suspicious for cancer in women over 50 years.

Demographics

Comparisons by demographic origin (health department, corporate or public screenings) did not reveal any clear differences (Table 4). The largest cohort were in the corporate group which utilized the lowest proportion of additional views compared to the public and health department groups. The highest number of mammograms per breast biopsy was seen in the public group. One cancer per three biopsies was found in the public group compared to one cancer per four biopsies in the corporate group, and one cancer per six biopsies in the health department group. The lowest number of biopsies per mammogram and the highest number of biopsies per cancer was seen in the health department group. The lowest number of mammograms per cancer were in the public group compared to the corporate and the health department groups which were roughly the same. The corporate group contained 2.5 times as many women under age 50. The public and health department groups were similar in that, the number of women under age 50 was only slightly higher than the number of women over age 50.

Table 4. Demographic Origin of Study Population

	Public Screenings	Corporate Screenings	Health Department Screenings
Mammograms	1,388	2,259	1,217
Additional Views	130	105	85
Breast Biopsies	21	40	29
Cancers Diagnosed	7	9	5
Under 50 Years Old	713	1,631	626
Over 50 Years Old	675	628	591
Cancer/Mammogram Ratio	1/198	1/251	1/243

Discussion

Approximately one third of the mammograms were carried out in women over 50 years of age (Table 2). Roughly equal proportions of women over and under age 50 were found in public and health department screenings. The corporate-sponsored mammography group contained a much higher proportion of women under the age of 50. Women under 50 tend to participate in breast cancer screening programs in equal or greater proportions than women over 50.[1,2,13] The ratio of mammograms to cancers detected is roughly 2.5 times higher in the under 50 age group. The proportion of additional views and breast biopsies were roughly the same in both age groups. Two thirds (13/21) of the cancers were detected in the over 50 age group, representing one third of the total population examined. Ironically, this group of older women represents a smaller proportion of women examined in this and other studies. The number of mammograms per cancer detected was 2.5 times higher and the number of biopsies per cancer detected was 2.8 times higher in women under 50 years of age. This represents inherent difficulties in the radiologic interpretation of mammograms in younger women.[2]

Eighty percent of the cancers diagnosed were identified in the suspicious for cancer group. The largest number of additional radiologic studies were performed in the probably benign group, resulting in the highest number of breast biopsies and the identification of only 14% (3/21) of cancers. The precise identification of radiologic evidence of malignancy demonstrated in the high yield of the suspicious for cancer category is a direct manifestation of the value of a highly skilled and experienced mammographer. This further raises the question of the appropriateness of mammographic interpretation by general radiologists who are not exposed to a high volume of mammograms or have not received specific training.

Surgeons nationwide have expressed concern over the dramatic increase in the number of benign breast biopsies being performed as a result of screening detected mammographic abnormalities. For almost a decade, the American College of Radiology Breast Cancer Detection Committee worked with dedicated mammographers to develop a standardized terminology for describing mammographic abnormalities and standardized "work-up" recommendations for further evaluation of abnormalities; the latter should significantly reduce the number of benign biopsies thus increasing the yield of breast cancers.[14]

Stratification by demographic origin revealed that a large proportion of younger women under 50 years were found in the corporate-sponsored group. Parenthetically, this resulted in the lowest utilization of additional views compared to public and health department groups. No other notable findings were observed.

In a perfect world with unlimited resources, issues of cost effectiveness and efficiency are of minimal importance. Unfortunately, as the health

care system in the United States undergoes change, it is clear that the availability of resources to provide services will be increasingly limited in the future. Under these circumstances, issues of cost effectiveness and efficiency take on greater importance. In this study, the overall sensitivity of the mammograms is 0.81 and higher than reported in other studies.[15] We would ascribe this to the fact that our results occurred with an experienced radiologist dedicated to reviewing all mammograms, which resulted in a higher cancer detection rate in women over 50 years of age. This high level of professional expertise is an important consideration in operationally conducting mammographic screenings in the most cost-effective manner.

Mammographic screening for breast cancer in women over 50 years of age reduces mortality compared to women of the same age who have not undergone mammographic screening, and the reduction in mortality is higher than achieved by mammographic screening in women 40 to 49 years of age.[1] This study and other studies have suggested that mammographic screening in women over 50 is more cost-effective in that the number of mammograms per cancer detected and the biopsies per cancer detected are lower in women over 50 years of age compared to women under 50 years of age.

Resolving the question of the cost effectiveness of mammogram screening women aged 40 to 49 will require a large randomized prospective trial. Rather than dwell on this issue, we would propose that this study suggests the need for greater emphasis in both public and professional education on breast cancer detection directed to women over 50 years of age. Our experience is consistent with other surveys suggesting that older women tend to be less health conscious, more afraid of having a malignancy, less willing to encounter discomfort, embarrassment or inconvenience of mammography than younger women. Consequently, they tend to participate less in available screening activities than younger and better informed women unless encouraged either by a physician or specifically tailored programs.[13]

References

1. Eddy DM, Hasselblad V, McGivney W, Hendee W. The value of mammography screening in women under age 50 years. *JAMA.* 1988;259:1512-1519.
2. Kerlikowske K, Grady D, Barclay J, Sickles EA, Eaton A, Ernster V. Positive predictive value of screening mammography by age and family history of breast cancer. *JAMA.* 1993;270:2444-2450.
3. Volkers N. NCI replaces guidelines with statement of evidence. *J Natl Cancer Inst.* 1994;86:14-15.
4. Shapiro S, Serax P, Venet L. Evaluation of periodic breast cancer screening with mammography: Methodology and early observations. *JAMA.* 1966;195:731-738.
5. Shapiro S, Venet W, Serax P, Venet L. Periodic screening for breast cancer: The health insurance plan project and its sequelae, 1963-1986. Baltimore: Johns Hopkins University Press, 1986.
6. Miller AB, Baines CJ, To T, Wall C. Canadian national breast screening study: I. Breast cancer detection and death rates among women aged 40 to 49 years. *Can Med Assoc J.* 1992;147:1459-1476.
7. Mettlin C, Smart CR. Breast cancer detection guidelines for women aged 40 to 49 years: Rationale for the American Cancer Society reaffirmation of recommendations. *Cancer.* 1994;44:248-255.
8. Eckhardt S, Badelinno F, Murphy GP. UICC meeting on breast-cancer screening in premenopausal women in developed countries. *Int J Cancer.* 1994;56:1-5.
9. Chu KC, Smart CR, Tarone RE. Analysis is breast cancer mortality and stage distribution by age for the health insurance plan clinical trial. *J Natl Cancer Inst.* 1988;80:1125-1132.
10. Feig SA. Follow-up studies of the health insurance plan study and the breast cancer detection demonstration project screening trials in the USA. *Recent Results Cancer Res.* 1990; 119:39-52.
11. Nystrom L, Rutquist LE, Wall S, et al. Breast cancer screening with mammography: overview of Swedish randomized trials. *Lancet.* 1993;341:973-978.
12. Kopans DB. Standardized mammography reporting. *Radiol Clin North Am.* 1992;30:257-261.
13. Rimer BK. Improving the use of cancer screening for older women. *Cancer.* 1993;72:1084-1087.
14. Kopans DB, D'Orsi CJ, Adler DD, et al. American College of Radiology Breast Imaging Reporting and Data System. Reston, Va: American College of Radiology; 1993.
15. Beam CA, Layde PM, Sullivan DC. Variability in the interpretation of screening mammograms by US radiologists. *Arch Intern Med.* 1996;156:209-213.

Webster's New Edition

There has been a plethora of things that I have learned once I was out in the "real world" of office and hospital practice. So many new concepts, in fact, that at one point I remember musing over the possibility of getting those three nice letters M.B.A. Or at the very least, I chastised myself for having not taken my father's advice and studying economics and finance in undergraduate school. Silly me . . . I packed my days with science and math courses so as to prepare myself better for the field of medicine.

Of course, there was also the time that I seriously contemplated law school, feeling that a J.D. might actually benefit me more. My husband quickly replied that I would probably be quite good at it. Was that a compliment?

In any event, I thought I would share some of the concepts that I have had the opportunity to learn. These words should all be added to the next addition edition of *Webster's Dictionary.*

Managed Care: Let's start with a good example of an oxymoron, or should we add the prefix "MIS"? Enough said.

Guest Relations: Obviously there is no need for doctors because we no longer have patients. We have guests, or clients, or customers. Did I get my degree in Hotel Management?

Right Sizing: Not "down" sizing anymore — the euphemism for deleting personnel (excuse me . . . FTEs . . .)

FTE: Full time equivalent — a.k.a. the people and staff that do the work, your co-workers.

Medical Information: This is another one that needs the prefix "MIS," for there is never the report you need in the record when you need it.

V.A.L.U.E. Matrix: Never have figured this out; this was a mnemonic we memorized prior to JCAHO inspection.

P.I.P.: Process improvement program. Another committee and more paperwork generated so we can show how we constantly strive for C.Q.I. . . . which brings us to . . .

C.Q.I.: Continuous quality improvement — why we have to have a process for something we all should be doing anyway, I'll never understand.

Clinical Path: Someone's way of dictating therapeutic options so the patients don't take up any more bed space.

Restrictive Covenant: Our own profession's thinly veiled internal way of denying "any willing provider."

Good Will: Actually, this is the contractual antithesis of "good."

Chairperson: This is what you call a woperson who is the head of a committee.

Any my personal favorite . . . . . .

Product Line: Used to refer to patients with certain diseases. I guess this is all a part of a good manufacturing practice.

Perhaps I'll do what I enjoy the most: Ignore all of these, and concentrate on the art and science of medicine.

You can cancel my order for the new *Webster's.*

Carolyn D. Burns, MD

It's Time To Tell Your Patients What They Need To Hear.

Lou's gradual hearing loss eventually became a detriment to the team.

The Louisville Hearing Aid Center's patient referral program provides an excellent opportunity to work together for the mutual benefit of those who come to us for care. It's quite simple; if any of your patients are experiencing hearing loss, refer them to us. In turn, we'll refer to you any of our patients that are in need of the specialized care that you provide. Everyone benefits. Especially the patients. For more information, give us a call at (502) 459-HEAR. Let's cover all the bases.

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The American Heart Association is fighting to reduce early death and disability from heart disease and stroke with research, professional and public education, and community service programs.

But more needs to be done.

You can help us find the answers by sending your dollars today to your local Heart Association, listed in your telephone directory.

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Membership

Karen King

Below is a list . . . from a recent telephone conference. These are examples to be used in your county membership drive.

1. Please pay your dues — If you can't work with us, we'll work for you.
2. "An Alliance volunteer working for you" on buttons worn by Alliance members when doing community service.
3. If you can't be active, be informed.
4. Together Everyone Achieves More (TEAM).
5. Membership begins with me.
6. Every member get a member.
7. One person can make a difference.
8. "Take a membership moment" where members write a postcard to members that have not attended any recent meetings or events.

The ABCs of Membership: TIPS FOR RECRUITING YOUNG MOTHERS

A dopt a school and encourage use of AMAA programs in the school.
B aby sitting provided at meetings is a must for young Moms.
C ommunication is paramount. Ask for space in your newsletter to develop a personal column, ie, "FYI" depicting what is happening in member's families.
D evelop a series of lectures that will be fun and educational; ie, speakers from the local zoo and museums.
E ncourage members to attend a Confluence or other leadership training program.
F orm play groups.
G reeters at each meeting. 1) to welcome each and every member and 2) to assign someone to sit with each new guest at the meeting.
H ave fun and maintain a sense of humor.
I dentify young mother's specific needs and help create a program to address them.
J oin committees on the Alliance and bring fresh and creative ideas with you.
K ey to success — Members need to feel welcome and needed — assign simple jobs to new members.
L end a hand to someone who needs it — form support groups for specific problems.
M embership begins with me — Encourage a commitment for each member to get a member.
N o one asked syndrome — make sure you contact all prospective members and ask them to join.
O ne on One — Still the best way to reach prospective members and retain seasoned ones!
P lan a welcoming party for new members of both the society and alliance and invite the leaders for both groups to attend.
Q uestionnaire requesting information as to what the young mother members expect from the Alliance and asking what the members can do for the Alliance.
R etention — Keep members involved — ask young moms to do jobs from home, ie, phoning, researching, etc.
S unday afternoon events such as B-B-Que or Picnic involving the entire family. Use this time to introduce children's programs such as the three workbooks, and "Hands are not for Hitting."
T ail Gate parties before an event encourages participation from families.
U pdate your membership application.
V isit your community Battered Women and Children's Shelter and find out how you can help them.
W ork with other coalitions that involve children.
X -tra ordinary membership values: The ability to make a difference in matters that count: Friendship and leadership skills to mention a few.
Y ou can make a difference — one voice joined with many has the power to make a difference.
Z ero in on resident and medical student spouse groups in your area — provide a coffee or underwrite a luncheon and attend.

Karen King
Chair, Membership Committee

Aroona Dave

Many Members Making Membership A Major Matter Means Maximum Membership

Many thanks to Kentucky Medical Association and especially Diane Maxey who helped our Membership Committee to design and put a very informative updated Membership Brochure together. Approximately over 700 of them have been mailed to the prospective members in the organized counties. Organized counties' membership chairs are using them to recruit new members and retain old ones. Where one is Silver, the other is Gold.

It takes one to make a difference. Winnie Mitchell in Madison County is that one person. Winnie recruited energetic, proactive and willing members and there they are. They now have a County Medical Society Alliance that is organized.

Join me in congratulating them! Madison County Medical Society Alliance WELCOME TO OUR FAMILY!

Aroona Dave
KMAA President

Physician Impairment and Health: A Brief Overview

by Larry S. Goldman, MD

In 1972, the American Medical Association's (AMA) Council on Mental Health published its report,[1] "The Sick Physician," drawing the profession's and the public's attention to the problem of impaired physicians. The report noted that numerous articles had appeared in the medical literature during the preceding 15-20 years suggesting that substance abuse (including alcoholism), other mental disorders, and suicide were significant health problems among physicians. This AMA report called for (1) all physicians to take responsibility for impaired colleagues, (2) the referral of impaired colleagues to appropriate committees or boards in order to obtain treatment and to protect patients, (3) educational programs for medical trainees about these problems, and (4) the development and implementation of model legislation for states in dealing with impaired physicians.

Although "sick doctor statutes" were already on the books in Florida (1969) and Texas (1971), this report catalyzed a period of increased legislative and regulatory activity. It also led to the establishment of new programs to assess, treat, and/or monitor impaired physicians; new course offerings in medical schools and residencies to educate trainees and to attempt to "inoculate" them against this occupational hazard; and additional research to clarify the nature, risk factors, course, and outcomes for impaired physicians.

During this time (1970s and early 1980s) most of this activity was focused on alcoholism and other substance abuse, and the emphasis was on physician impairment and recovery from these substance use disorders after they had already taken their toll. Eventually every state had developed some program to deal with affected physicians, and as more physicians came (or were sent) forward into these programs, more clinical and epidemiologic information began to accumulate.

First, subsequent studies of addiction rates among trainees and practicing physicians suggested that overall, physicians' misuse of substances was not necessarily greater than that of nonphysicians of comparable age and other similar demographic factors.[2,3] While rates of abuse of prescription drugs seemed to run somewhat higher, rates of illicit drugs were quite a bit lower.[4] Secondly, there was a growing appreciation for the occurrence in physicians of other mental disorders, particularly depression and bipolar disorder. These conditions were seen both as co-occurrent with substance use disorders or simply by themselves. Finally, there were other conditions which caused impairment that were not mental disorders or at least which did not fit well into standard psychiatric nomenclature. In the first group were physical infirmities, including cardiac, musculoskeletal, neurologic (stroke, MS, blindness, etc), and other conditions.[5] The second category consisted of behavioral problems such as sexual exploitation of patients or abusiveness towards patients or co-workers.[6]

Many impaired physician programs were developed in conjunction with state medical societies. In some cases this was simply a small, voluntary committee of society members, but certain states began to develop more extensive programs with a professional staff and even medical directors. An ongoing tension has been the relationship between these programs and the state licensing boards.[7] The licensing boards, which are charged with a primary mission of public protection, have sought to know as much as possible about any cases of physician illness or impairment. Some states have created "diversion programs," which allow physicians to be referred to health programs without having to be reported to their state licensing boards. States with those arrangements have generally found that they are able to get more physicians to enter treatment voluntarily, often at earlier stages of their illnesses (ie, before they were so impaired they did something to warrant licensing board reporting or action).[8,9]

As these programs came to enjoy the trust of their licensing boards and of physicians, the scope of types of cases coming to the programs increased. This expanded clinical demand — along with the research findings mentioned earlier — has led the field to a shift from substance abuse and impairment to broader consideration of disorders of all types and incorporation of disease prevention and health promotion.

As the field of physician health has continued to evolve, there has been an ongoing need to disseminate new information about clinical practice, program development, and regulatory issues to practitioners, administrators, and educators. One forum for this dissemination has been a series of international conferences held every 1-2 years which are co-hosted by the

AMA and the Canadian Medical Association. These three-day meetings, alternating between US and Canadian venues, generally bring together 300-400 people, mostly from North America and Europe, with an interest in physician health. The most recent conference was held February 7-10, 1996, in Chandler, Arizona. The conference included half-day updates (institutes) on psychiatry, substance abuse, and women's health, as well as five plenary speakers who discussed topics as diverse as women in surgery, spirituality, medical students, the Americans with Disabilities Act, and population-based medicine. Presentations were held on stress in medical schools; managing medical and psychoactive drugs in recovering physicians; intervention strategies for physician health committees; monitoring physicians with personality disorders; fund-raising for physician health programs; national efforts to assist impaired physicians; and the effects of the "health care crisis" on physicians' emotional health, among others.

The next such conference will be held April 29-May 2, 1998, in Victoria, British Columbia, Canada. The theme, *Managing Our Own Care: Surviving the Health Care Revolution,* will emphasize the effects of the changing health care delivery system on physician well-being. The call for papers was open to a broad range of submissions, with a particular emphasis on: stresses related to changes in health care systems; primary prevention of illness and impairment; needs of particular physician populations such as trainees, older physicians, minorities, women, and IMGs; physical illness and disability; rehabilitation, re-training, and re-entry; the relationship between physician factors and medical errors; physician and family self-care and reactions to illness or stress; reactions to bad outcomes and lawsuits; harassment of and by physicians; relationships among hospital programs, state programs and licensing authorities; and dealing with physicians who misprescribe.

For additional information on the conference call the AMA Department of Mental Health at 312-464-5066. Information can also be found on the World Wide Web at **www.ama-assn.org** or at **www-psy.bsd.uchicago.edu/~larry/uchome.htm.**

References

1. Council on Mental Health. The sick physician: impairment by psychiatric disorders, including alcoholism and drug dependence. *JAMA* 1972; 223:684-687.
2. Brewster JM. Prevalence of alcohol and other drug problems among physicians. *JAMA* 1986; 255:1913.
3. Hughes PH, Brandenburg N, Baldwin DC. Prevalence of substance abuse among US physicians. *JAMA* 1992;267:2333-2339.
4. Council on Scientific Affairs. *Substance Abuse Among Physicians.* Chicago: American Medical Association; 1995.
5. Corbet B, Madorsky JG. Physicians with disabilities. *West J Med* 1991;154:514-521.
6. Summer GL, McCrory E. Professional sexual misconduct. Alabama Med *1994;64:4-6.*
7. Ad Hoc Committee on Physician Impairment. Report of the ad hoc committee on physician impairment. *Federation Bulletin* 1994;81:229-242.
8. Casper E, Dilts SL, Soter JJ et al. Establishment of the Colorado physician health program with a legislative initiative. *JAMA* 1988;260:671-673.
9. Ziegler PP. The physicians' health programs of the educational and scientific trust of the Pennsylvania Medical Society. *Federation Bulletin* 1995;82:151-154.

Dr Goldman is Director of the Department of Mental Health, American Medical Association, and Clinical Associate Professor, Department of Psychiatry, University of Chicago.

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Reference Committee G
(Medical Practice and Facilities)
AMA Interim Meeting, December 7-10, 1997

This article is written one week before the interim meeting of our American Medical Association House of Delegates, which will take place December 7-10, 1997, at Dallas, Texas. Reference Committee G typically deals with issues involving medical practice and facilities.

One of the main points of discussion and controversy for Reference Committee G this year will be the "Sunbeam" issue. There presently are eight resolutions and probably more to come which deals with the issue calling for various actions. I will try to summarize what has taken place to this point.

Earlier this year, representatives from the AMA and Sunbeam began exploring the idea of establishing a partnership to provide consumers with health information. This information would be with Sunbeam Corporation's line of "Health at Home" products, which include vaporizers, blood pressure monitors, heating pads, hot and cold packs, and air and water filters.

Our AMA seal or logo would appear on the packaging along with a notice informing the consumer that valuable medical information could be found inside. It apparently was felt that our AMA would benefit because Sunbeam would pay us a royalty on sales thereby helping our AMA support its many educational programs. Consumers would benefit by getting balanced health care information. Sunbeam would benefit by having the AMA logo standing behind its products. Throughout the spring and summer of this year, Sunbeam and AMA personnel negotiated the terms of the agreement. This was signed apparently by the AMA's chief operating officer on the 5th of August, 1997. A press conference announced the contractual agreement one week later. Almost immediately, our AMA came under serious criticism from the membership, the media, and the public. There was great concern that this type of activity involving the AMA is unethical, involves conflict of interest, and is improper. The AMA Board of Trustees initially tried to institute "Damage Control" and stated that they were not aware of the details of the contractual agreement or a part of the negotiations. After a subsequent meeting of the Board, the AMA informed Sunbeam that it was withdrawing from the contract. Sunbeam subsequently filed a $20 million lawsuit against the AMA.

Sunbeam Corporation has stated that it is not about to surrender fundamental aspects of the program. They feel they have every right to hold the AMA to the negotiated agreement and will continue to pursue its contractual rights.

Percy Wooten, MD, President of the AMA, spoke to the Kentucky Medical Association House of Delegates at its September annual meeting. He made it a point to distance the AMA Board of Trustees from the knowledge of the negotiation and the actual signing of the agreement. He vowed that the failure of the usual safeguards in place at the AMA to prevent this type of situation would be thoroughly investigated.

The Board of Trustees of the AMA has taken a series of actions including extensive review of the events which transpired, the apparent circumvention of applicable AMA policies and procedures, and the resignation of some high level AMA staff.

The AMA House of Delegates, however, is the body ultimately responsible for AMA policy. Constituent chapters and members of the House are still quite concerned. Several of the resolutions are calling for a committee to be formed by the House of Delegates and not by the Board of Trustees to investigate the Sunbeam issue and related issues of non dues income and related contracts, also to study policy and procedural safeguards and report back to the House of Delegates in June.

The ultimate goal is to prevent a recurrence of this embarrassing situation. The credibility of our AMA as the ethical voice of medicine must be maintained.

Donald J. Swikert, MD
AMA Delegate

Committee on Medicaid Managed Care

by Donald R. Neel, MD

The way the Medicaid system is run in Kentucky is changing. Despite the success of the nationally recognized KENPAC program, the state has decided to move Kentucky's Medicaid system into a new managed care program. Many other states have tried various Medicaid managed care initiatives, which have met with mixed results.[1] Kentucky, however, has initiated a unique project that is unlike any other system in the country. The state is essentially turning the Medicaid program over to Kentucky's medical providers. To do this, the Medicaid population has been divided into eight geographic regions, with each region having to form its own infrastructure and program, called "Partnerships," to service the Medicaid recipients. The state will pay each region a per member-per month fee to fund the operation of each Partnership.

While turning the program over to providers sounds tempting, the concept has encountered many pitfalls. For a Partnership to operate, providers in a given region must come together to form and operate the program. This is a daunting prospect, although many regions have worked very hard to bring the providers together. Each region must also establish an infrastructure to manage the system and the cost is astronomical. It has been estimated that $5 to $10 million is needed to fund such a project, which makes it very difficult for rural providers to fund the program. The regulations governing the Partnerships are, of course, intricate and complicated, which also makes forming one difficult.[2] Finally, many providers, not to mention patients, must be educated on the aspects and requirements of managed care, which is no small order.

While these problems do exist, two regions have already developed the necessary infrastructure to manage their Medicaid populations. Regions three and five, which encompass the Louisville and Lexington areas respectively, are in the process of enrolling patients into their programs. These regions have been supported by a strong urban base of providers, as well as the Universities, which have partially funded the programs. Both regions have overcome numerous roadblocks during development which will, hopefully, make it easier for other regions to avoid such problems. Regions three and five, of course, have the urban base which may be necessary to get the programs started. The rest of the state is not so lucky. The providers and patients in rural areas have little experience with managed care. The funding will also be a problem for these areas, although some of them are working hard to see that the potential for such a project is at least explored.

The state has said that if a region does not form a Partnership, the Medicaid system in that region will be put "up for bid" to private industry. This may be worrisome to many, although it has been apparent in the last few years that many private companies are not renewing their Medicaid managed care contracts in other states because they have been unable to turn a profit.[3]

While the Kentucky Medical Association has expressed many concerns about this project (not the least of which has been the contention that KENPAC is working) KMA wants to ensure its membership is properly apprised of developments in this program. To do this, KMA has created a new committee known as the "Committee on Medicaid Managed Care." This committee is comprised of two physicians from each of the eight Medicaid regions around the state and most of them have intimate knowledge of what is happening in their regions. We hope the committee will be a forum for these physicians to inform each other on what is going on and, possibly, exchange information to help physicians in all areas of the state better understand this new system. We intend to hold meetings throughout the year and pass on to the membership what we learn.

This is a challenging time in our profession with changes occurring almost daily. Kentucky's Medicaid system is just one example of these changes and KMA is working to keep the membership informed on the various aspects of this new system.

References

1. United States General Accounting Office. *Medicaid: Spending Pressures Drive States Toward Program Reinvention.* April 1995;6-7, 37-40.
2. 907 KAR 1:705.
3. Page L. HMOs back away from Medicaid. *American Medical News.* Jan 13, 1997; 3, 22.

Don Neel, MD, is a pediatrician in Owensboro, Kentucky. He is also the Vice-Chair of the KMA Board of Trustees and Chair of the new Committee on Medicaid Managed Care.

PEOPLE

Robert R. Goodin, MD, a Louisville cardiologist and past KMA President, has been reappointed to serve a one-year term (January 1, 1988–December 31, 1998) on the AMA Accreditation Council for Continuing Medical Education. Dr Goodin was appointed to serve as the AMA Executive Committee member.

David H. Neustadt, MD, a Louisville rheumatologist, received the American College of Rheumatology "Distinguished Rheumatologist Award" for 1997. The award recognizes a single ACR member for outstanding contributions in the areas of patient care, clinical scholarship, or service to benefit patients with rheumatic diseases. Dr Neustadt's career has spanned 43 years in Louisville. He is currently Clinical Professor of Medicine at the University of Louisville, and was formerly Chief and Director of the Division of Rheumatic Diseases at the University. He established the first rheumatology training program at the University of Louisville and continues to teach medical residents and fellows at the School of Medicine.

Barbara Phillips, MD, Lexington, is serving a 3-year term as president of the American Board of Sleep Medicine (ABSM). The American Board of Sleep Medicine was formed to produce an examination for the purpose of establishing and maintaining standards of individual proficiency in the field of sleep disorders medicine. According to ABSM, Dr Phillips plays an integral role in making sure all aspects of the examination process (Finance, Credentialing, Part I, Part II Committees) are functioning as they should.

Praised for his humanitarianism, University of Louisville anesthesiologist **Benjamin M. Rigor, MD,** was the winner of the U of L President's Distinguished Service Award, which was presented during the University's Celebration of Excellence ceremony. Since being named chair of anesthesiology in 1981, Dr Rigor has co-founded several voluntary medical missions including Operation Rainbow, Operation SMILE International, P.A.G.E.S. and Operation HOPE. Doctors and other medical personnel in these philanthropic organizations perform reconstructive surgery on impoverished patients in the Philippines and other developing nations in Asia, as well as provide a variety of other vital medical services, including medical training programs. Dr Rigor organizes the teams, which comprise surgeons, anesthesiologists and nurses.

UPDATES

U of L, Cancer Center Launch Follow-up Breast Cancer Study

More than 10,000 women who participated in a breast cancer study in the early 1970s at the James Graham Brown Cancer Center are being contacted to participate in a follow-up study about their general health, breast health, menstrual and hormonal replacement histories, and lifestyle.

The study builds on an extensive database of information gathered from 10,128 women who entered the Breast Cancer Detection and Demonstration Project (BCDDP) between 1973 and 1975. The cases of most women in the study were followed for a varying number of years afterward, but none have been contacted for at least 12 years.

The original study was funded by the National Cancer Institute and the American Cancer Society. The University of Louisville and the Brown Cancer Center participated as one of 29 sites nationwide. Statistical data generated from the trial contributed a great deal to the understanding and treatment of breast cancer, according to **John Spratt, MD,** professor of surgery and health systems and coordinator of the new study.

Dr Spratt participated as an examining physician in the original project. After coming to U of L in 1976, he authored or co-authored nearly 20 studies using BCDDP data. Those studies dealt with topics including cancer growth rates, risk factors, and tumor size detection thresholds.

Women who agree to be part of the follow-up study will receive forms indicating their willingness to participate along with the first of several surveys they will be asked to complete over the next few months.

Any woman who participated in the BCDDP project who would like to participate in the follow-up study should contact the BCDDP Follow-up Project, James Graham Brown Cancer Center, 529 S Jackson Street, Louisville, KY 40202. Inquiries should include the respondent's name as it appeared on the original 1973-75 entry data as well as a current name and address.

The current study is being funded by grants from the Louisville Regional Cancer Center Corp and the Adult Cancer Program at Alliant Health System.

For more information, call Dr Spratt at 502.852.5592.

U of L Faculty Promotions

KMA member physicians included in a list of faculty promotions at the University of Louisville are **Michael Heit,** obstetrics and gynecology, assistant professor; **Edwin Render,** anesthesiology, assistant professor; **Richard Blondell,** family and community medicine, professor; **Sheldon Bond,** surgery (pediatric), associate professor; **David Doering,**

obstetrics and gynecology, associate professor; **Sophia Franco,** pediatrics, professor; **Terence Hadley,** medicine (medical oncology/hematology), professor; **Stephen McClave,** medicine (gastroenterology), professor; **George Rodgers,** pediatrics, professor, and pharmacology and toxicology, professor; and **Wayne Tuckson,** surgery (general), associate professor.

Tactical Physicians Go on Site with SWAT Teams

University of Louisville emergency medicine residents now can opt for additional training as "tactical physicians" who accompany strategic weapons and tactics (SWAT) teams to crisis sites. The physicians treat anyone injured at the scene and can work with commanders before raids to evaluate potential problems — such as hazardous chemicals present in most illegal drug labs.

SWAT team members work with more confidence, says emergency medicine professor **William S. Smock, MD,** knowing that they'll receive immediate treatment in case of emergency. In return, physicians get excellent protection from the team.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Boyd

James B Carrico MD — R
4929 Robin Hood Dr, Ashland 41101-6835
1991, U of Louisville

Seth Dashe MD — OBG
118 St Christopher Dr, Ashland 41101-7016
1979, Northwestern U, Chicago

Kurt F Jaenicke MD — OBG
2001 Winchester Ave, Ashland 41101
1988, U of S Carolina, Columbia

Roderick J Tompkins MD — S
2222 Winchester Ave, Ashland 41105-1865
1992, U of Louisville

Calloway

Christopher Lee Poor MD — EM
5317 Dunbar Rd, New Concord 42076
1994, U of Illinois, Chicago

Daviess

Karen M Bickett MD — R
PO Box 807, Owensboro 42301
1991, U of Louisville

Roger L Humphrey MD — S
2816 Veach Rd Bldg 5, Owensboro 42303
1977, U of Texas, Southwestern

John D Lauzon MD — PD
2211 Mayfair Dr Ste 106, Owensboro 42301
1982, U of Kentucky

Arup Maitra MD — IM
2301 N Wintergreen Loop, Owensboro 42301
1982, Armed Forces Med Col, India

Fayette

Philip C Booker MD — AN
4030 Tates Creek Rd Apt 3956, Lexington 40517-3060
1992, U of Louisville

Jean E Cibula MD — N
UKMC Ky Clinic L445, Lexington 40536
1991, Case Western Reserve U

Richard Coleman MD — R
2213 Azalea Dr, Lexington 40504
1992, U of Tennessee

Robert W Lightfoot Jr MD — RHU
107 Woodside Way, Nicholasville 40356
1961, Vanderbilt

Jose M Manaligod MD — OTO
2485 Brookshire Cir, Lexington 40515-1228
1990, Illinois Med Col

Robert M Mentzer Jr MD — TS
UKMC Surgery, Lexington 40536
1971, Bowdoin, Maine

Khalil U Rahman MD — NEP
1517 Nicholasville Rd Ste 405, Lexington 40503
1984, Fatima Jinnah Col, Pakistan

Earl G Robbins II MD — GE
316 Colony Blvd, Lexington 40502
1990, U of Kentucky

David W Rudy MD — IM
104 Thoroughbred Ln, Nicholasville 40356
1983, Commonwealth U, Virginia

Grant

Joseph E Hartig MD — PD
PO Box 150, Dry Ridge 41035
1992, U of Kentucky

Hardin

Leigh A.Pearman MD — PD
1010 Woodland Dr, Elizabethtown 42701
1994, U of Louisville

Jefferson

Heath E Brown MD — OBG
9914 Arterburn Woods Dr, Louisville 40223-2800
1993, U of Louisville

Mohammad E Majd MD — ORS
416 Eline Ave, Louisville 40207-2940
1979, Faculty of Med Isfahan U, Iran

Mary L McCormick MD — IM
5511 Apache Rd, Louisville 40207
1980, U of Louisville

Richard N Medley III MD — S
9108 Linn Station Rd, Louisville 40222
1992, U of Kentucky

Johnson

Milot Frederick Faria MD — S
1110 S Mayo Trl Ste 5, Paintsville 41240
1986, Topiwala National Med Col, India

Madison

Gina L Land MD — OBG
311A Radio Park, Richmond 40475
1993, U of Kentucky

McCracken

Rajgopal R Pakanati MD — AN
2831 Lone Oak Rd, Paducah 42003
1988, Osmania Med Col, India

Pulaski

Owen S Maat MD — GE
118 Tradepark Dr, Somerset 42503
1992, U of Texas, Galveston

IN-TRAINING

Fayette

Hanna Mawad MD — NEP

Jefferson

Christopher R Grieves MD — EM
Girolamo Jerry Trotti MD — R

DEATHS

Robert L. McKenney, MD
Falmouth
1925-1997

Robert L. McKenney, MD, a general practitioner, died August 29, 1997. Dr McKenney graduated from the University of Louisville School of Medicine in 1954 and was an active member of KMA.

Harold B. Graves, MD
Harlingen, TX
1911-1997

Harold B. Graves, MD, a retired OB-GYN, died October 6, 1997. A 1937 graduate of Homeopathic Medical College of Missouri, Dr Graves was a life member of KMA.

Robert J. McCabe, MD
Newport
1921-1996

Robert J. McCabe, MD, a dermatologist, died October 12, 1997. Dr McCabe was a 1944 graduate of the University of Cincinnati College of Medicine, and an active member of KMA.

Mario W. Cartaya, MD
Campbellsville
1914-1997

Mario W. Cartaya, MD, a retired general practitioner, died October 12, 1997. A 1947 graduate of the University of Havana School of Medicine, Dr Cartaya was a life member of KMA.

David P. Edmundson, MD
Mount Sterling
1912-1997

David P. Edmundson, MD, a retired general practitioner, died August 31, 1997. Dr Edmundson was a 1936 graduate of the University of Tennessee College of Medicine and a life member of KMA.

Robert C. Smith, MD
Newport
1919-1997

Robert C. Smith, MD, a retired psychiatrist, died September 5, 1997. A 1945 graduate of the University of Cincinnati College of Medicine, Dr Smith was a life member of KMA.

Daniel H. Boeh, MD
Ft. Thomas
1910-1997

Daniel H. Boeh, MD, a retired general practitioner, died November 13, 1997. Dr Boeh was a 1936 graduate of the University of Cincinnati College of Medicine and a life member of KMA.

Thomas F. Whayne, Sr, MD
Lexington
1905-1997

Thomas F. Whayne, Sr, MD, a retired preventive medicine physician and former University of Kentucky assistant vice president and associate dean for administration and professor of community medicine died November 18, 1997. A 1931 graduate of Washington University School of Medicine, Dr Whayne was a life member of KMA.

CHS Nursing Home Review

The Cabinet for Health Services is instituting several changes in the way nursing care reviews are being handled for the Medicaid program that involve physicians.

Secretary John Morse has told legislators he wants to improve the appeals process and the communication between the cabinet, nursing home residents, their families, their physicians and HealthCare Review Corp, the peer review organization.

The changes include:

- HealthCare Review will not decertify anyone without first speaking to the attending physician. Attending physicians will be asked to fax a document to HealthCare Review to show why nursing care is not necessary.
- No decertification will occur without the patient's guardian being contacted by a representative of Medicaid to explain the process and appeal rights.
- A notice will be sent to the nursing home patient, the family, the doctor, the nursing home and the long term care ombudsman to explain their case is under review and that Medicaid criteria may not be met. This will help insure that HealthCare Review has access to the full medical record and speaks to the attending physician. This will occur before any decision is made to decertify a patient.
- The cabinet, with the help of the nursing home industry, will prepare a brochure to help educate patients and families about Medicaid coverage for long term care.

Morse said he wants to make sure the reviews are accurate and that HealthCare Review is making decisions based on the complete medical record.

The changes are in response to concerns about some nursing home patients receiving notices informing them they would lose Medicaid coverage. In some instances, HealthCare Review did not have access to complete medical records or had not spoken to the attending physician.

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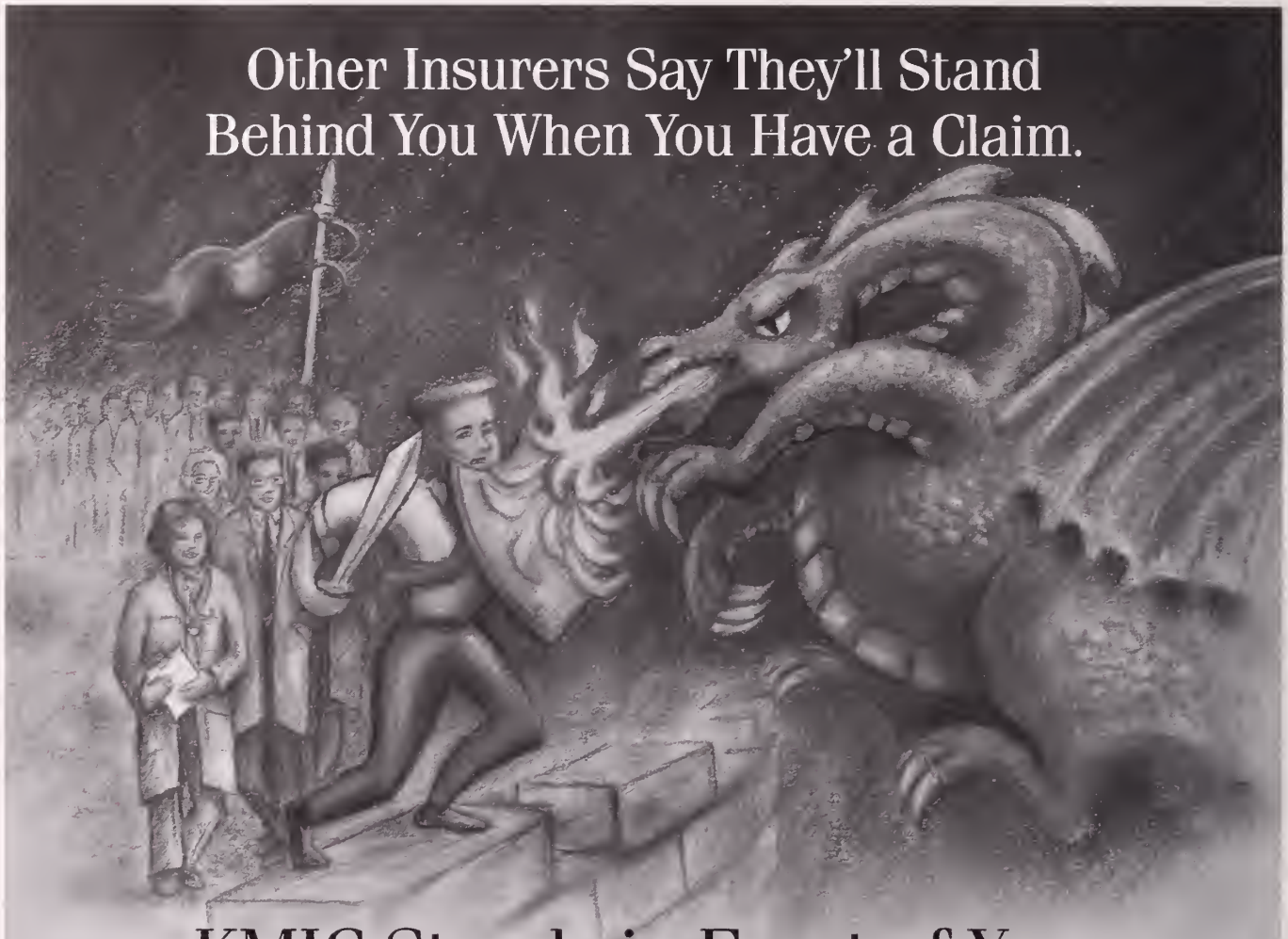
Cutaneous Melanoma of the Head and Neck

FEBRUARY 1998
VOLUME 96 NUMBER 2

Other Insurers Say They'll Stand Behind You When You Have a Claim.



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VOLUME 96, NUMBER 2 FEBRUARY 1998

COVER:
Louisville surgeons discuss the importance of early recognition and diognosis of melonomo.

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PO Box 1238
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Donald C. Barton, MD
121 Bishop St
Corbin 40701
(606) 528-2124 1999

Wally O. Montgomery, MD
PO Box 7329
Paducah 42002-7329
(502) 441-4300 1998

Robert R. Goodin, MD
6420 Dutchmans Pkwy #200
Louisville 40205-3338
(502) 891-8300 1998

Ardis D. Hoven, MD
1221 South Broadway
Lexington 40504-2771
(606) 255-6841 1999

Donald J. Swikert, MD
8172 Mall Rd Center #231
Florence 41042
(606) 525-6247 1998

Alternate Delegates to the AMA

Bob M. DeWeese, MD
6206 Glen Hill Rd
Louisville 40222
(502) 426-5565 1998

J. Gregory Cooper, MD
PO Box 730
Cynthiana 41031-0730
(606) 234-6000 1999

Preston P. Nunnelley, MD
2620 Wilhite Dr
Lexington 40503-3302
(606) 278-0363 1998

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20 Medical Village Dr #308
Edgewood 41017
(606) 341-2672 1998

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Crises Intervention

Harry W. Carloss, MD

The publication deadline for this message is early December, after the special session on health insurance and before the beginning of the biennial legislative session. At this time in my hometown of Paducah, Kentucky, it is difficult to concentrate on anything without having your mind wander to the senseless carnage at one of our local high schools. This event directly or indirectly touched almost everyone in our small community. The local hospital emergency room and staff and the community physicians responded admirably, tearfully, as children of our friends, co-workers, and neighbors were brought in for treatment. Everyone did their jobs; no-one was concerned about all of the minor things that preoccupy our lives on a daily basis. The competitive environment amongst ourselves, hospitals, and various insurance plans were forgotten. The immediate threat was addressed in an all encompassing manner.

History teaches us that in a crisis, individuality and differences are sacrificed for a greater common goal. It is easy to pull together in such a threat. However, when the threat is insidious, it is less likely to elicit a similar response. As physicians we have observed radical changes in our healthcare system. We have seen the adoption of a healthcare plan that has dramatically increased the number of uninsured patients in our state. It has disproportionately and adversely affected children. There are national trends affecting patient rights and physician choice. Physicians have been prevented from discussing treatment options. Treatment decisions are being formed on the basis of cost rather than sound medical judgment.

We must recognize that these insidious changes will produce a decrease in quality and quantity of life just as surely as a gunman's bullets. Physicians must act together as we would in an emergency situation. We must influence legislation to improve medical care for the population. We must protect those who cannot speak for themselves or who do not comprehend the results affected by change. We would never think that we were too tired, too busy, or too self concerned to act in a medical emergency. We must also adopt this attribute to insidious political change and profit motivation in healthcare.

Help your lobbyist and legislative quick action committee by being informed. Read the *Communicator* and legislative bulletins. Contact your legislators. You can leave a message for them in Frankfort at 1-800-372-7181.

Harry W. Carloss, MD
KMA Vice President

NEWS FOR KENTUCKY PHYSICIANS
1998 KENTUCKY GENERAL ASSEMBLY

The following legislation, introduced through January 31, 1998, relates to medical practice and health care.

LEGEND:
Bill Number/Sponsor/Bill Title

SENATE BILLS:

SB 2/128 — Scorsone — KCHIP
Establishes Kentucky Child Health Plan (KCHIP), a preventive health services plan for children up to age 18 in families with income below 250% FPL who are ineligible for Medicaid.
SB 7— Metcalf — DUI
Reduces driving under the influence from 0.10 to 0.08
SB 14/73 — Scorsone — Sale of Non-profit Health Facilities
Requires hearings by Attorney General to assure protection of public investment in non-profit health care facilities.
SB 19/107/110 — Pendleton— Long Term Care Insurance
Excludes premiums paid for LTC Insurance from taxes.
SB 28 — Boswell — Physician Assistants
Allows PAs to prescribe nonscheduled legend drugs
SB 29 — Tori — Abortion
Establishes 24 hour waiting period for abortion procedures.
SB 38 — Seum — Motorcycle Helmets
Permits 21 year olds or older to ride a motorcycle without helmets.
SB 56 — Nunnelley — Prescription Provider tax
Repeals prescription provider tax.
SB 63/90 — Buford — Autism
Mandates health insurance coverage for Autism; $500 monthly limit.
SB 121/124 — Boswell — Partial Term Abortion
Criminalizes performance of partial term abortion.
SB 135 — Herron — Managed Care
Requires managed care entities to provide list of participating providers.
SB 140 — Nelson — Omnibus Health Insurance Reform
Reforms previous (1994-96) health insurance legislation.
SB 145 — Pendleton — Brain Injury Trust Fund
Establishes Traumatic Injury Trust Fund. Program funded by moving vehicle violations and DUI convictions.
SB 146 — Pendleton — Tobacco
Moves jurisdiction for enforcement of violations by minors purchasing tobacco products from the Department of Agriculture to Juvenile Session of District Court.

HOUSE BILLS:

HB 1— Adams — Water Safety
Establishes age limits for individuals operating personal watercraft.
HB 5/408 — Hogancamp — Partial Birth Abortion
Criminalizes performance of partial birth abortion.
HB 27— Bowling — Lethal Injection for Execution
Permits lethal injections. Prohibits physician involvement except to certify death, but only after condemned has been declared dead by another individual.
HB 70 — Crimm — Abortion Facilities
Defines abortion facilities and requires licensure.
HB 85 — Stine — Abortion
Requires 24 hour waiting period for abortions.
HB 106 — P. Clark — Motorcycle Helmets
Permits motorcyclists over 21 to ride motorcycles without helmets.
HB 115 — Coleman — Prescription Drug Abuse
Implements the Attorney General Task Force recommendations.
HB 118 — Wayne — Medicaid
Expands Medicaid coverage to include autism and pervasive developmental disorders.
HB 124 — Mason — Medicaid
Mandates physician participation in Medicaid.
HB 125/255 — Mason — KCHIP
Implements Federal/State financed Kentucky Child Health Insurance Program
HB 128 — Brandstetter —
Charitable Health Provider

Defines charitable health care; permits Cabinet for Health Services to license and regulate various "charitable providers."

HB 131 — Burch — TB tests
Deletes requirement that children have skin TB tests.

HB 156 — Marzian Hepatitis B tests
Requires pregnant women to be tested for hepatitis B.

HB 157/184 — Mason — Long Term Care Insurance
Excludes long term care insurance premiums from state taxes.

HB 158 — P. Clark — Naturopathy
Defines the practice of naturopathy. Permits naturopathist to prescribe, perform minor surgery, and obstetrics.

HB 160 — P. Clark — Acupuncture/Oriental Medicine
Defines the practice of acupuncture and establishes the practice of oriental medicine.

HB 178 — Heleringer — Medicaid
Exempts mentally retarded from Medicaid Managed Care.

HB 187 — Burch — Whistle Blowers
Protects hospital employees when reporting violations.

HB 189 — Marzian — ARNP
Permits RNs to teach, delegate, and supervise health services to nonlicensed school personnel.

HB 190 — Marzian — ARNP
Permits ARNPs to sign school attendance statements.

HB 192 — Ballard — Riders in Open Vehicles
Prohibits children under age 18 from riding in open pickup trucks.

HB 213 — Burch — Medicaid
Prohibits developmental disabled from being placed in Medicaid Managed Care.

HB 214 — Marzian — Abortion
Allows additional persons to give minors consent for abortion.

HB 227— Coleman — Fraud and Abuse
Expands fraud and abuse statutes to subjecting officers, administrators, and trustees to same provisions as providers; refusing to refer when medically necessary; increases penalties and fines; expands lien on providers property who violates laws; increases and expands Attorney General's role in Fraud & Abuse; establishes new categories of "patient abuse" that include "improper training" by facilities.

HB 243 — Alexander — Alternative Medicine
Defines nonconventional or complementary medicine under the Medical Practice Act. Restricts the Board of Medical Licensure from disciplining alternative physician practitioners.

HB 244 — Burch — Health Insurance Reform
Strengthens present provisions adopted under HB 250.

HB 254 — Marzian — Bicycle Helmets
Requires children under age 14 riding bicycles
to wear helmets.

HB 278 — Gray — MSAs
Establishes medical savings accounts.

HB 285 — Coleman — Pronouncement of Death
Permits specially trained paramedics to pronounce death.

HB 292 — Kerr — Defines Human Beings
Declares unborn child in uteros as a human being and person.

HB 293 — Kerr — Prosecution/Unborn in Uteros
Allows prosecution for wrongful death for unborn child in uteros.

HB 299 — Marzian — Brain Injury Trust Fund
Establishes Kentucky Traumatic Brain Injury Trust Fund. Program funded through fines for moving vehicle violations and DUI.

HB 302 — Nunn — Renal Dialysis
Requires renal dialysis facilities to have energy backup resources.

HB 304 — Marzian — Boards and Commissions
Requires all Boards and Commissions to be equally represented by male and female.

HB 315 — Damron/DeWeese — Health Insurance Reform
Health insurance reform; patient protection and provider fairness; requires health insurers to support "uninsurable" either through taxes or to insure equitable numbers; defines "high risk."

HB 322 — Coleman — DUI
Reduces BAC in DUI cases from 0.10 to 0.08.

HB 324 — Lindsay — Non-profit Facilities
Requires Attorney General to hold public hearings and protect public interest when "for profits" purchase non-profit health facilities.

HB 380 — Marzian — Diabetes
Requires health benefit plans to cover diabetes.

HB 381 — Marzian — Tobacco Sales to Minors
Permits local governments to enact more stringent laws to restrict minors' access and purchase of tobacco products.

HB 398 — Crall — Health Insurance
Repeals most health insurance laws enacted in 1994 through HB 250; retains patient protection and provider fairness provisions.

HB 403 — Crimm — Clinical Exercise Physiologists
Licenses CEPs under Board of Medical Licensure.

HB 423 — Scott — Emergency and Disaster Personnel
Grants immunity to voluntary disaster and emergency response teams and personnel when acting in good faith.

NATIONAL LEGISLATION

The following is a letter from KMA President Ken Peters, MD, to the Regional Administrator of HCFA. This letter was sent in response to a HCFA pamphlet recently issued to Medicare beneficiaries regarding fraud and abuse.

Ms Rose Crum-Johnson
Regional Administrator
Health Care Financing Administration
101 Marietta Street
Suite 702
Atlanta, Georgia 30323

Dear Ms Crum-Johnson:

I would like to express the Kentucky Medical Association's concern regarding a recent publication from your office. In the *Medicare Update* for Fall/Winter 1997, the following statement appears twice on the first page: "Despite our efforts, it is estimated that as much as $23 billion was stolen from Medicare." It is becoming commonplace for those in the press and public to use the $23 billion figure when referring to Medicare fraud and it is misleading. I was disappointed to see your agency also using this figure.

A report issued by the Congressional Research Service does not support your contention that $23 billion was **stolen** from Medicare. The report, entitled *Health Care Fraud: A Brief Summary of Law and Federal Anti-Fraud Activities*, states: "A financial audit report issued by the Office of the Inspector General (OIG) of the Department of Health and Human Services (HHS) in July, 1997, estimated that improper Medicare payments made in FY 1996 totaled $23 billion . . . These improper payments ranged from inadvertent mistakes to outright fraud and abuse. The OIG could **not** quantify what portion of the error rate was attributable to fraud." (emphasis in original)

The charged atmosphere surrounding health care fraud and abuse is troubling and the use of inaccurate statements inflames this atmosphere. Physicians support the investigation and prosecution of anyone who knowingly violates the law. But, the line between what may be classified as fraud and what may be classified as an honest disagreement is not always clear. As physicians, we have struggled with HMOs and managed care regarding the determination of what is "medically necessary" in the treatment of patients. Physicians are in the best position to make this determination and the public seems to agree. The Clinton Administration, Congress, and many states are preparing legislation to allow patients more rights when a health plan disagrees with a physician. Must we now tell our patients we cannot disagree with government officials on matters regarding treatment because of the threat of prosecution? This is becoming a very real concern for physicians.

Unsubstantiated statements from government agencies damage the physician/patient relationship and bring discredit to the agency. I hope you will not add to this politically charged atmosphere by making misleading statements similar to the one in your latest publication and I urge you to print a clarification regarding these facts.

C. Kenneth Peters, MD
President

cc: Kentucky's Congressional Delegation
American Medical Association

Diagnosis and Treatment of Cutaneous Melanoma of the Head and Neck

Wayne K. Stadelmann, MD; Kelly McMasters, MD, PhD; Hiram C. Polk, Jr, MD

There were an estimated 40,300 cases of melanoma in the United States in 1997, of which 7,300 resulted in death.[1] In Kentucky alone in 1996, approximately 630 individuals were diagnosed with melanoma, and 120 died of the disease. Fortunately, there is a growing awareness of the severity of the melanoma epidemic. Through increased public education and screening of suspicious skin lesions by family practitioners and dermatologists, patients with melanoma are being diagnosed at an ever earlier stage, when the chance for cure is the greatest. Additionally, emerging technology has made the treatment of melanoma more specific and less invasive. Public awareness, improved early detection, and new technical advances are particularly important when treating patients with cutaneous head and neck melanoma. In this review, we discuss the importance of early recognition and diagnosis of melanoma, the appropriate work-up, as well as some of the indications for, and details of, emerging technology in the treatment of melanoma, especially as it relates to the head and neck.

Case 1: A 50-year-old man was evaluated by his family physician for a pigmented "mole" on his scalp along the midline near the coronal suture. The lesion had irregular borders, an irregular surface, variegated pigmentation, and was about 7 mm in diameter. The patient had no symptoms, was otherwise healthy, and had no family history of melanoma. On the advice of his physician, a full-thickness, 3-mm punch biopsy was performed in the office using local anesthesia. This revealed a 1.3 mm, Clark level IV, nonulcerated malignant melanoma. The patient was subsequently referred to the University of Louisville's J. Graham Brown Cancer Center for further care.

At the University of Louisville, the patient was found to have no parotid, cervical, or clavicular adenopathy, and had no findings or symptoms suggesting distant metastatic disease. In addition to a complete history and physical examination, the work-up consisted of a chest x-ray and a liver function profile; the results of which were all found to be normal. Because the patient had no adenopathy and no evidence of metastatic disease, no further screening tests were needed. The patient subsequently underwent preoperative lymphatic mapping in the nuclear radiology suite on the morning of his operation. This demonstrated drainage of the primary tumor site to *both* cervical regions directly beneath the sternocleidomastoid muscles. Later that same afternoon, the patient underwent a wide local excision of the primary tumor with 2-cm margins. He also underwent a biopsy of bilateral cervical sentinel lymph nodes through two small incisions (Figs 1 and 2). These nodes were found to be free of tumor. His recovery has been uneventful, and no further treatment has been recommended other than regular follow-up by his family physician and his melanoma surgeon.

This case demonstrates several key issues that will be addressed in this review: melanoma identification, diagnosis and work-up, surgical margins of excision, guidelines for lymph node evaluation, indications for adjuvant therapy, and the need for close postoperative follow-up examinations and ongoing screening for subsequent new primary melanomas.

Diagnosis and Initial Management of Head and Neck Cutaneous Melanoma

It is safe to argue that the greatest single advancement in the treatment of melanoma in the past decade has been greater public awareness of melanoma and the early diagnosis of the disease by primary care physicians and dermatologists. The prognosis of melanoma correlates directly with

Dr Stadelmonn is Assistant Professor of Plastic and Reconstructive Surgery; Dr McMosters is the Sam and Lolita Weakley Assistant Professor of Surgicol Oncology, J. Graham Brown Concer Center; ond Dr Polk is the Ben A. Reid, Sr Professor ond Choirmon of the Department of Surgery, University of Louisville School of Medicine. All outhors ore olso offilioted with the Center for Advonced Surgical Technologies ot Norton Hospitol, Louisville, KY.

Reprint requests to Department of Surgery, c/o Editoriol Office, University of Louisville School of Medicine, Louisville, KY 40292 (Dr Stadelmonn). Phone: 502/852-5198. Fax: 502/852-8915.

Table 1. Differentiol Diognosis of the Pigmented Skin Lesion

Molignont melonomo (nodulor, superficiol spreoding, lentigo moligna, amelanotic, ocrol lentiginous, desmoplostic)
Dermotofibromo
Melononychia striata
Subunguol hemotomo
Pigmented bosol cell carcinoma
Lentigines: solar lentigines, lentigo simplex
Melonocytic nevi: junctionol, introdermol, compound
Nevus spilus
Blue nevus
Spitz nevus
Dysplostic nevus
Holo nevus
Hemongiomos
Venous lakes
Pyogenic gronulomo
Koposi's sorcomo
Pigmented actinic kerotosis
Pigmented Bowen diseose
Extromommory Poget diseose

Table 2. Worrisome Physicol Findings When Evoluoting o Skin Lesion

Asymmetry of the overoll pottern
Border irregulority
Color voriegotion especiolly red, white, ond blues
Diometer greoter thon 6 mm

Table 3. Stoging Bosed on 1992 Joint Committee on Concer Stoging for Cutoneous Melonomo

Stoge I:	Tumor less thon 1.5 mm in thickness ond/or invodes the popillory dermis or obuts the popillory reticulor-dermol interfoces (Clork level II ond III) No lymph node metostases. No systemic involvement.
Stoge II:	Tumor greoter thon 1.5 mm ond/or invodes the reticulor dermis or subcutoneous tissues (Clork level IV ond V) ond/or sotellites within 2 cm of the primory tumor. No lymph node metostoses. No systemic involvement.
Stage III:	Any tumor thickness or level of invosion. Lymph node involvement. No systemic metostoses.
Stoge IV:	Any tumor thickness or level of invosion. Any level of lymph node involvement. Distont metostases present.

tumor thickness. Far more lives are saved by early detection and treatment of melanoma, at a stage in which surgical excision alone is often curative, than are saved by new technology and adjuvant therapy.

The diagnosis of melanoma should be considered whenever a cutaneous lesion is being evaluated as a possible malignancy (Table 1). Worrisome findings on physical examination can be remembered by the acronym "ABCD": *A*symmetry of the overall pattern; *B*order irregularity; variable *C*olor, especially red, white, and blues; and a *D*iameter greater than 6 mm (Table 2). Also worrisome are any changes in existing moles. These lesions should be considered melanoma until histologically proven otherwise. If the suspicious lesion is small, an *excisional* biopsy with a 1- to 2-mm rim of normal-appearing skin should be performed. Larger lesions that cannot be removed without significant disfigurement or ease should undergo an *incisional* biopsy at the thickest part of the lesion. Shave biopsies are less satisfactory than full-thickness biopsies and should be avoided, if possible, because an accurate assessment of the thickness of the melanoma cannot be obtained from the specimen. Tumor thickness is the single most important prognostic factor for survival of Stage I and II melanoma (no evidence of nodal or distant metastases) (Table 3).[2-6] Tumor thickness also determines the subsequent recommended excisional margins at the time of wide local excision and whether or not the regional lymph nodes should be evaluated. Margins of excision for diagnosis may be kept to a minimum. Removal of excess skin from around the primary tumor may potentially alter the local lymphatic drainage patterns. This may decrease the ability to reliably map the regional lymphatics draining the melanoma, thereby decreasing the success of performing a sentinel lymph node (SLN) biopsy.

Patients diagnosed with malignant melanoma should undergo a total body skin examination to rule-out other cutaneous malignancies and also to establish a baseline. This examination can be performed by the patient's family physician or a dermatologist. Suspicious lesions can be located and documented with a photograph for later comparison. Any interval change in the appearance of suspicious lesions, or if symptoms such as pain, itching, bleeding, or nonhealing occur, immediate evaluation with a full-thickness biopsy is warranted.

Once the primary melanoma has been biopsied and diagnosed, many patients as well as the

treating clinicians will become quite anxious about the timing of the subsequent definitive wide local excision and possible nodal staging procedure. The perception is that every minute spent waiting for the next stage of treatment is another minute available for metastases to spread. While this sentiment merits theoretical consideration, clinical trials have failed to show that waiting 3 or more weeks between the biopsy and the definitive wide local excision negatively influences 5-year survival.[7-9] Patients can therefore be reassured that a delay of a few weeks between the biopsy and the definitive excision and nodal basin biopsy/dissection will not adversely influence their survival.

Work-up to Rule Out Distant Metastatic Disease

The staging work-up of melanoma patients continues to be an area that lacks consensus. Until a histologic diagnosis of melanoma is made, further tests such as x-rays, laboratory work, and computerized tomography should not be obtained. These tests are expensive, often have false-positive results that require more tests for clarification, and generate an unnecessary amount of anxiety, stress, and fear.[10] When melanoma is diagnosed, the work-up should consist of a thorough history and physical examination, chest x-ray, and liver function tests. In patients with no clinical signs of advanced disease, computerized tomography is nearly always negative. Only when the chest x-ray, liver function tests, or history and physical examination are suggestive of advanced lymph node involvement and/or distant metastatic disease should more tests be obtained. Generally, the need for further work-up for metastatic disease should be determined by the surgeon who will be treating the primary melanoma.

Status of the Regional Lymph Nodes

Why do we perform lymph node dissections? There are two basic reasons in oncology to evaluate regional lymph nodes: to stage and to cure. The removal of regional nodal metastases is potentially curative. Even patients with clinically positive (palpable) lymph nodes have a significant long-term survival rate (approximately 25%) with lymphadenectomy alone. Patients who have a single positive lymph node have a 10-year survival rate in excess of 40%, and that survival rate may be even higher now that very early microscopic metastases can be identified using sentinel lymph node technology. Certainly there are some data to suggest that elective lymph node dissection may improve survival in some subgroups of patients, especially those who have intermediate-thickness melanomas.[11]

Controversy continues to surround the issue of how best to treat occult regional nodal metastases. There are currently three options used for treating the regional nodal basins in patients with AJCC Stage I and II disease. In addition to wide local excision of the primary tumor based on the tumor thickness, the regional nodal basin can be either followed clinically without further surgical intervention, removed by an elective lymph node dissection, or evaluated by biopsy of the SLNs draining the primary tumor site. Individual treatment options are as follows.

Wide Local Excision and Close Clinical Follow-up, With Therapeutic Lymph Node Dissection for Palpable Recurrence

Proponents of this approach point out that randomized, prospective trials have repeatedly failed to show a convincing survival benefit for melanoma patients who undergo prophylactic removal of the regional lymph nodes or elective lymph node dissection.[12-14] Furthermore, in patients with melanoma primaries that are located in areas with ambiguous nodal drainage patterns, such as over the head and neck and midline trunk, more than one nodal basin may need to be dissected. This significantly increases the potential morbidity for a procedure of questionable benefit. In the head and neck, the lack of convincing data that neck dissection improves survival may influence many surgeons to adopt the "watch and wait" approach. However, those who favor this approach must accept the fact that some patients will have occult microscopic lymph node metastases.

Wide Local Excision and Elective Lymph Node Dissection

Patients with thin melanomas (<1 mm) have a very good chance for cure with local excision alone without elective lymph node dissection. Patients with thick melanomas (>4 mm) are not believed to benefit from elective lymph node dissection, since they have a very high incidence of both regional and distant metastatic disease.[15] Elective lymph node dissection to remove occult nodal metastases has been advocated for the lymphatic basins draining the site of primary tumors that are of intermediate thickness (1 to 4 mm). To

Fig 1 — Blue dye injection (in another patient with an axillary primary) showing the visible uptake of dye in the lymphatics leading to the draining nodal basin.

Fig 2 — Sentinel node localization using the combination technique of blue dye injection and intraoperative radiolymphoscintigraphy. This combined technique is enormously helpful in the head and neck area.

Fig 3 — Sentinel lymph node in situ. In this particular patient, a forehead melanoma was found to have lymphatic drainage to both the parotid and posterior triangle areas.

date, however, there are no definitive studies that demonstrate a clear advantage to performing or not performing an elective lymph node dissection in this population of patients.[11-14] The major problem with performing an elective lymph node dissection is that only about 20% of patients will have nodal metastases. Eighty percent of patients undergoing an elective lymph node dissection will therefore be subjected to the morbidity of an operation which, in retrospect, they did not require. Ideally, only patients who have a high likelihood of having nodal involvement would be offered a full-nodal basin dissection. This is the area in which sentinel node technology may have its greatest impact.

When treating melanoma primaries over the head and neck region, it is particularly difficult to

determine which nodal basin to explore. Unlike extremity tumors that have a relatively predictable pattern of nodal basin drainage, head and neck tumors can drain to basins that would not typically be included in an elective lymph node dissection.[16-20] In one study, the discordance rate between the predicted lymphatic drainage basin and basin(s) identified on the lymphoscintogram was up to 84%. This led to a change in the operative plan (additional nodal basins dissected or contralateral dissections performed) in 62% of patients.[17]

Wide Local Excision With Lymphatic Mapping and Sentinel Lymph Node Biopsy

Lymphatic mapping and SLN biopsy is a relatively new technique that addresses the problems inherent in the first two strategies discussed earlier. The theory behind SLN mapping is that for any area of skin, there is an afferent lymphatic channel that leads to a specific first-draining lymph node, the sentinel node. The sentinel node, therefore, is the first node to which the melanoma will spread. Melanoma nodal metastases are believed to progress in an orderly and nonrandom fashion. The SLN therefore accurately reflects the status of the lymph nodes in that nodal basin.[21] The likelihood that the SLN is negative while another, non-sentinel node in the same nodal basin is positive (a "skip" metastasis) is rare, occurring in less than 1% of SLNs removed. Sentinel lymph node biopsies are particularly useful for melanomas located in ambiguous lymphatic drainage areas (eg, head and neck, trunk) and where multiple SLNs are the rule rather than the exception. Failure to identify and subsequently remove all of the SLNs represents an inadequate nodal staging procedure and will potentially place the patient at risk for higher recurrence rates.[22]

When the SLN is positive for tumor, the patient is considered for adjuvant therapy, and regional lymph node dissection is strongly advised to remove any potential residual melanoma. When the SLN is negative, the lymphatic basin is observed for the development of clinical nodal involvement. *Sentinel lymph node biopsy should not be confused with a therapeutic procedure. The SLN biopsy is a diagnostic procedure designed to determine the presence of nodal metastases so that a full lymph node basin dissection can be performed and appropriate adjuvant therapy instituted.*

Determining which patients should be offered SLN analysis is based on the probability of developing regional nodal metastases. Generally, patients with a melanoma less than 1-mm thick are considered to be at low risk for nodal metastases. Statistically, SLN mapping would be of very limited value in this population. With melanomas thicker than or equal to 1 mm, the risk of developing regional metastases is sufficiently high enough to justify the procedure.[23] There does not appear to be an upper limit in tumor thickness above which SLN biopsies are no longer indicated. Regardless of the primary tumor thickness, as long as there is no palpable adenopathy or evidence of distant metastatic disease, SLN evaluation is potentially beneficial.

Patients with clinically palpable regional adenopathy should undergo a fine needle aspiration of the nodes to confirm the clinical diagnosis. If the fine needle aspiration is positive, a full-nodal basin dissection should be performed. In addition to providing important data regarding future survival, nodal basin dissection may prove to be curative in up to 20% of patients.[24,25] Palpable adenopathy in the head and neck is best addressed at an early stage to avoid the potential wound healing problems and challenges associated with large resections for uncontrolled regional disease.

Sentinel lymph node technology allows nodes to be removed from any area of the head and neck. Although it is richly invested with lymphatic tissue, the parotid gland is not a lymphatic organ. There is no oncologic or physiologic reason to remove the entire gland. Ninety percent of the lymph nodes in the parotid gland are superficial to the facial nerve, minimizing the risk of facial nerve damage during the biopsy procedure.[26] Routine superficial parotidectomies are no longer indicated for melanoma staging. To date, no definitive studies have proven that elective lymph node dissection improves survival; however, it is known that elective lymph node dissection involving the parotid gland is positive for metastatic disease in only 5% of patients.[27] Superficial parotidectomy is also a potentially morbid procedure with a high complication rate.[27] Recently, a series of 23 patients treated with parotid SLN biopsies has been reported, revealing a high rate of successful node retrieval and a low incidence of complications.[28]

Although SLN technology has great potential promise, randomized prospective trials with adequate follow up remain forthcoming. Until these studies are published and demonstrate comparable disease-free and 5-year survival statistics, this new technology must continue to be considered investigational.

Intraoperative Treatment of the Primary Tumor

Historically, the margins of excision for malignant melanoma were excessively wide.[29] Prospective, randomized clinical trials have shown that narrower margins of excision do not correlate with decreased 5-year survival.[2,30-32] Currently, the margins of wide local excision are determined by the thickness of the primary tumor (Table 4). These margins should be adhered to as closely as possible when dealing with melanomas located over the head and neck. In situ lesions should have a 0.5-cm margin,[2] tumors less than 1 mm should have a 1-cm margin,[30] and tumors greater than 1 mm but less than 4 mm in thickness should have an excision with margins proportionate to thickness.[31,32] Data for tumors greater than 4-mm thick is lacking, however, it is generally believed that these tumors should be excised with *at least* a 2-cm margin of uninvolved skin. When treating melanomas located near critical anatomic areas such as the eyelids, nose, and other aesthetic areas over the head and neck, using the recommended margins may result in deformity and/or loss of function. Generally, smaller margins are used in such circumstances. If narrower-than-recommended margins are to be used, the patient needs to be made aware that a trade off is being made between aesthetics and function and local recurrence rates. The decision to use narrower margins should be clearly documented in the patient's chart.

The depth of tumor excision should include the full thickness of the skin and some underlying subcutaneous tissue preserving the underlying fascia, perichondrium, and periosteum.[33] Local tissue flap and free-tissue reconstruction were discouraged in the past because of the concern that tumor recurrences would be concealed, delaying the detection and worsening the outcome.[34] Clinically, flap reconstruction has not been shown to worsen the disease-free survival rates or the local recurrence rate.[35]

Table 4. Recommended Margins of Excision of the Primary Melanoma

Thickness (mm)	Margin (cm)
In situ	0.5
<1	1
1-4	2*
>4	At least 2†

*Narrower margins may be taken on the face in critical aesthetic and functional areas.

†No studies available that specifically address margins in tumors thicker than 4 mm.

Significance of Lymph Node Status

The presence of lymph node metastases in patients with melanoma reduces the 5-year survival by 40%.[36] Although many other factors relating to the primary tumor may be taken into consideration in determining prognosis, these are all relatively unimportant when nodal metastases are considered.[37] As is true with most solid tumors, one of the most powerful prognostic indicators of survival in melanoma is the number of lymph nodes involved with metastatic tumor. Patients with one positive node fare the best, with 40% alive at 10 years, whereas those with two to four nodes have an intermediate 10-year survival of 18%. Patients with more than 5 nodes have the worst 10-year survival rate at 9%.[37] More importantly, the presence of nodal metastases has become a critical piece of information for determining future adjuvant therapy. This is believed to be especially true if the tumor burden is small, such as when micrometastases are identified by using very sensitive assays to evaluate lymph nodes. The combination of SLN technology and highly sensitive assays for evaluating lymph nodes has made it possible to stage melanoma in patients quickly, accurately, and with a minimal amount of morbidity.

Adjuvant Therapy

Until recently, little could be offered other than palliative therapy to the patient who had regional metastatic disease. The poor prognosis usually reflected the late stage at which the diagnosis was made when multiple regional nodes were involved. Adjuvant forms of therapy have also been relatively ineffective. Recently, the results of the Eastern Cooperative Oncology Group Trial # 1684 evaluating the efficacy of interferon alfa 2b were published.[38] This prospective trial randomized high-risk melanoma patients (most with nodal metastases) into receiving either 1 year of high-dose interferon alfa 2b or observation. Interferon alfa 2b was shown to be effective in prolonging relapse-free survival by 11% and overall 5-year survival by 9% for patients with nodal metastases. This drug is now FDA-approved for use as adjuvant therapy in melanoma patients with a high risk of relapse.

Interferon alfa 2b therapy, however, may be associated with severe potential side effects. The recommended drug administration protocol delivers interferon alfa 2b at doses near the maximal tolerated dose, making it difficult for many patients to complete a year's worth of therapy. The side effects, which include flu-like symptoms (fever, myalgia, headache, etc), depression, anorexia, and fatigue, can be debilitating. Therefore, it would be best to determine which subgroups of patients would benefit most from interferon alfa 2b, and treat only those who may potentially gain from this form of therapy. Because most of the patients in the Eastern Cooperative Oncology Group Trial[38] had advanced disease (palpable or recurrent lymph node metastases), it is important to verify these results in more favorable groups of patients. A particularly interesting group are those with a single microscopic lymph node metastasis identified by lymphatic mapping and sentinel lymph node biopsy. Once again, the importance of early detection and diagnosis on the part of the primary physician cannot be overemphasized.

Radiotherapy may play a role as an adjuvant to therapeutic node dissection. Local control in excess of 85% has been reported when radiotherapy was used as an adjunct to node dissection in pathologically node-positive patients and in patients with extra-nodal disease.[39] Other studies confirm these favorable results.[40] Our practice is to recommend radiotherapy when nodal metastases are numerous.

Patients with Stage IV disease (distant metastases) have little chance for cure.[41] Management should involve a careful examination to determine whether chemotherapy, radiation therapy, and surgical intervention may play a role in preserving the quality of life. The goal in Stage IV disease should be to reduce the incidence of complications and pain. In the asymptomatic patient with end-stage disease, no intervention may be the best approach.

Follow Up

Most melanoma recurrences occur within 3 years after excision. Postoperatively, patients are asked to return at decreasingly frequent intervals to undergo a screening history and physical examination. Chest x-rays and liver function testing, when indicated, are performed annually. If these screening measures disclose signs or symptoms of possible systemic disease, further tests are performed, as indicated. Patients and their families are also informed about how to identify signs and symptoms of melanoma recurrence, especially local recurrences. In one study, 90% of patients with recurrent disease had a history of symptoms such as local nodularity, satellites, adenopathy, chronic cough, headaches, bone pain, gastrointestinal disturbances, etc.[42] Close follow up with a dermatologist for whole body skin examinations is also wise, since many of these patients will develop future cutaneous malignancies. The risk of developing a second and a third primary melanoma is as high as 3% to 7%.[43]

Ongoing Research

The Sunbelt Melanoma Trial is a randomized, prospective study involving almost 1,400 patients at 60 different institutions from around the country. The study was developed and initiated at the University of Louisville, Department of Surgery. It is the only major multi-institutional trial of lymphatic mapping and sentinel lymph node biopsy for melanoma (ongoing or planned) in the world. The goal of the study is to determine whether interferon alfa 2b therapy improves survival in patients with very early nodal metastases detected by lymphatic mapping and sentinel lymph node biopsy. The study incorporates sensitive PCR assays of sentinel nodes and of peripheral blood cells to detect circulating melanoma cells. Patients with melanomas thicker than 1 mm, and who have no clinical adenopathy or distant metastases, are potentially eligible to be enrolled in this study.*

Conclusion

As the melanoma epidemic progresses, more and more primary care physicians and dermatologists will be asked to evaluate and work-up suspicious skin lesions. It cannot be overemphasized that early detection remains the best method to improve survival. Many thin melanomas are cured with simple excision without the need to do further expensive or painful tests or biopsies. In patients with localized melanoma greater than 1 mm in thickness and without clinical nodal involvement, controversy continues to surround the issue of whether or not, and how to, evaluate the nodal basin for micrometastatic disease. Determining which nodal basin is at risk is often difficult, if not impossible, as is the case in the head and neck melanoma. The SLN technique, although still investigational, offers great promise in this area. This is proving to be highly reliable,

accurate, relatively easy to perform, with minimal associated risk and morbidity. With fewer lymph nodes removed, greater care and more specific and sensitive studies can be performed on those nodes, such as immunohistochemical stains and the newly developed and highly sensitive RT-PCR assay. Clinical trials pioneered at The University of Louisville are now in progress, evaluating the usefulness of RT-PCR technology and its role in determining who will benefit from interferon alfa 2b therapy.

We conclude that factors such as increased public awareness; prompt recognition, diagnosis, and referral for surgical excision; newer methods to obtain and evaluate regional lymph nodes; and more effective adjuvant therapy for patients at high risk, are the primary reasons why patients with melanoma are no longer in a hopeless position.

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References

1. Parker SL, Tong T, Bolden S, Wingo PA. Cancer Statistics, 1996. *CA Cancer J Clin.* 1996;46:3-4.
2. Evans GRD, Manson PN. A variation in the appearance of melanoma-in-situ (Clark's level I malignant melanoma). *Plast Reconstr Surg.* 1994;94:513-517.
3. Meyskens FL Jr, Berdeaux DH, Parks B, Tong T, Loescher L, Moon TE. Cutaneous malignant melanoma (Arizona Cancer Center experience). I. National history and prognostic factors influencing survival in patients with stage I disease. *Cancer.* 1988;62:1207-1214.
4. Schuchter L, Schultz DJ, Synnestvedt M, et al. A prognostic model for predicting 10-year survival in patients with primary melanoma. *Ann Intern Med.* 1996;125:369-375.
5. Balch CM, Soon SJ, Murad TM, Ingalls AL, Maddox WA. A multifactorial analysis of melanoma. II. Prognostic factors in patients with stage I (localized) melanoma. *Surgery.* 1979; 86:343-351.
6. Drzewiecki KT, Andersen PK. Survival with malignant melanoma: a regression analysis of prognostic factors. *Cancer.* 1982;49:2414-2419.
7. Eldh J. Excisional biopsy and delayed wide excision versus primary wide excision of malignant melanoma. *Scand J Plast Reconstr Surg.* 1979;13:341-345.
8. Landthaler M, Braun-Falco O, Leitl A, Konz B, Holzel D. Excisional biopsy as the first therapeutic procedure versus primary wide excision of malignant melanoma. *Cancer.* 1989; 64:1612-1616.
9. Lederman JS, Sober AJ. Does wide excision as the initial diagnostic procedure improve prognosis in patients with cutaneous melanoma? *J Dermatol Surg Oncol.* 1986;12:697-699.
10. Buzaid AC, Ross MI, Soong SJ. Classification and staging. In: Balch CM, et al, eds. *Cutaneous Melanoma;* 3rd ed. St. Louis: Quality Medical Publishing, 1998:37-50.
11. Balch CM, Soong SJ, Bartolucci AA, et al. Efficacy of an elective regional lymph node dissection of 1 to 4 mm thick melanomas for patients 60 years of age and younger. *Ann Surg.* 1996;224:255-266.
12. Veronesi U, Adamus J, Bandiera DC, et al. Inefficacy of immediate node dissection in stage I melanoma of the limbs. *N Engl J Med.* 1977;297:627-630.
13. Sim FH, Taylor WF, Ivins JC, Prichard DJ, Soule EH. A prospective randomized study of the efficacy of routine elective lymphadenectomy in management of malignant melanoma: preliminary results. *Cancer.* 1978;41:948-956.
14. Coates AS, Ingvar CI, Petersen-Schaefer K, et al. Elective lymph node dissection in patients with primary melanoma of the trunk and limbs treated at the Sydney Melanoma Unit from 1960 to 1991. *J Am Coll Surg.* 1995;180:402-409.
15. Crowley NJ, Seigler HF. The role of elective lymph node dissection in the management of patients with thick cutaneous melanoma. *Cancer.* 1990;66:2522-2527.
16. Norman J, Cruse CW, Espinosa C, et al. Redefinition of cutaneous lymphatic drainage with the use of lymphoscintigraphy for malignant melanoma. *Am J Surg.* 1991;162:432-437.
17. Wells KE, Cruse CW, Daniels S, Berman C, Norman J, Reintgen D. The use of lymphoscintigraphy in melanoma of the head and neck. *Plast Reconstr Surg.* 1994;93:757-761.
18. Berman CG, Norman J, Cruse CW, Reintgen DS, Clark RA. Lymphoscintigraphy in malignant melanoma. *Ann Plast Surg.* 1992;28:29-32.
19. Feind CR, Cole RM. Contralateral spread of head and neck cancer. *Am J Surg.* 1969;118:660-665.
20. Wanebo HJ, Harpole D, Teates CD. Radionuclide lymphoscintigraphy with technetium 99m antimony sulfide colloid to identify lymphatic drainage of cutaneous melanoma at ambiguous sites in the head and neck and trunk. *Cancer.* 1985;55:1403-1413.
21. Reintgen DS, Cruse CW, Wells KE, et al. The orderly progression of melanoma nodal metastases. *Ann Surg.* 1994; 220:759-767.
22. O'Brien CJ, Uren RF, Thompson JF, et al. Prediction of potential metastatic sites in cutaneous head and neck melanoma using lymphoscintigraphy. *Am J Surg.* 1995;170:461-466.
23. Singluff C, Stidham KR, Ricci WM, Stanley WE, Seigler HF. Surgical management of regional lymph nodes in patients with melanoma. *Ann Surg.* 1994;219:120-130.
24. Buzaid AC, Tinoco LA, Jendiroba D, et al. Prognostic value of size of lymph node metastases in patients with cutaneous melanoma. *J Clin Oncol.* 1995;13:2361-2368.
25. Reintgen DS. Melanoma nodal metastases. *Surg Oncol Clin N Am.* 1996;5:105-120.
26. McKean ME, Lee K, McGregor IA. The distribution of lymph nodes in and around the parotid gland: an anatomical study. *Br J Surg.* 1985;38:1-5.
27. O'Brien CJ, Petersen-Schaefer K, Papadopoulos T, Malka V. Evaluation of 107 therapeutic and elective parotidectomies for cutaneous melanoma. *Am J Surg.* 1994;168:400-403.
28. Wells KE, Stadelmann WK, Rapaport DP, Hamlin R, Cruse CW, Reintgen DS. Parotid gland sentinel lymphadenectomy in malignant melanoma. Fourth World Conference on Melanoma. Sydney, Australia, June 12, 1997.
29. Handly WS. The pathology of melanotic growths in relation to their treatment. *Lancet.* 1907;1:927,996.
30. Veronesi U, Cascinelli N. Narrow excision (1-cm margin). *Arch Surg.* 1991;126:438-441.

31. Balch CM, Urist MM, Karakousis CP, et al. Efficacy of 2-cm surgical margins for intermediate-thickness melanomas (1 to 4 mm). *Ann Surg.* 1993;218:262-269.
32. Karakousis C, Balch CM, Urist MM, Ross MM, Smith TJ, Bartalucci AA. Local recurrence in malignant melanoma: long term results of the multiinstitutional randomized surgical trial. *Ann Surg Oncol.* 1996;3:446-452.
33. Kenady DE, Brown BW, McBride CM. Excision of underlying fascia with a primary malignant melanoma: effect on recurrence and survival rates. *Surgery.* 1982;92:615-618.
34. Polk HC Jr. Malignant melanoma: current perspectives with emphasis upon treatment according to prognosis. *J Ky Med Assoc.* 1978;76:593-598.
35. Lent WM, Ariyan S. Flap reconstruction following wide local excision for primary malignant melanoma of the head and neck region. *Ann Plast Surg.* 1994;33:23-27.
36. Reintgen DS, Albertini J, Miliotes G, et al. The accurate staging and modern day treatment of malignant melanoma. *Cancer Research Therapy Control.* 1995;4:183-197.
37. Stadelmann WK, Rapaport DP, Soong SJ, Reintgen DS, Balch CM. Prognostic, clinical, and pathologic features. In: Balch CM, et al, eds. *Cutaneous Melanoma;* 3rd ed. St. Louis: Quality Medical Publishing, 1998:11-35.
38. Kirkwood JM, Strawderman MH, Ernstoff MS, Smith TJ, Borden EC, Blum RH. Interferon alfa-2b adjuvant therapy of high-risk resected cutaneous melanoma: the Eastern Cooperative Oncology Group Trial EST 1684. *J Clin Oncol.* 1996;14:7-17.
39. Ang KK, Byers RM, Peters LJ, et al. Regional radiotherapy as adjuvant treatment for head and neck malignant melanoma. *Arch Otolaryngol Head Neck Surg.* 1990;116:169-172.
40. Trotti A, Peters LJ. The role of radiotherapy in the primary management of cutaneous melanoma. *Ann Plast Surg.* 1992;28:39-44.
41. Barth A, Wanek LA, Morton DL. Prognostic factors in 1,512 melanoma patients with distant metastases. *J Am Coll Surg.* 1995;181:193-201.
42. Schumate CR, Urist MM, Maddox WA. Melanoma recurrence surveillance: patient or physician based? *Ann Surg.* 1995; 221:566-571.
43. Scheibner A, Milton GW, McCarthy WH, Norlund JJ, Pearson LJ. Multiple primary melanomas: a review of 90 cases. *Australas J Dermatol.* 1982;23:1-8.

Venomous Snake Bite of a Child

Michael W. Simon, MD, PhD

Dr Simon is in private practice at 2647 Regency Road, Suite A-2, Lexington, KY 40503. Phone 606-277-6516.

Venomous snake bites account for 9 to 15 deaths yearly. This is a low number considering that approximately 8,000 venomous snake bites occur each year. These deaths may be prevented by proper and timely medical treatment.

It is estimated that 8,000 venomous snake bites occur each year in the United States.[1] Approximately 99% of these bites are from the pit vipers, including: prairie rattlesnake, cotton-mouth or water moccasin, and copperhead.[2] About 1% of venomous snake bites are from the coral snake.

Venomous snake bites result in 9 to 15 deaths per year.[1] These deaths occur in children and adults that are untreated or mismanaged. Children are the victims of 50% of all venomous snake bites,[3] most often involving children 1 to 9 years of age.[1] They are unaware of the hazard and are most likely to pick up a snake. This article reports a case of venomous snake bite in a child and reviews current recommendations for medical management.

Case History

A 5-year-old white male in good health was attending a camp for diabetic children where his mother serves as a nurse. During an evening he stepped from a van onto a grassy area in his bare feet onto a snake. The snake struck him on the right foot. He was taken to a center for emergency care and admitted for observation and treatment of the snake bite.

Figs 1-2

The bite was thought to be that of a copperhead measuring 1 inch width between the fang bite. The complete blood count, coagulation studies, and blood chemistries were normal. The bite did not require antivenin administration. The child was treated conservatively with elevation and close observation over the next several days. No additional changes occurred. Repeat coagulation studies, complete blood count, and blood chemistries were normal.

He was discharged home on Cefalexin and instructed to continue conservative care. The child did well over the following 5 days. Then he developed progressive swelling of his right foot and calf. The day prior to admission he developed a low grade fever that began spiking as high as 40.5 C.

Examination showed a swollen right foot with 2 fang strike marks 1 inch in distance separation (Figs 1,2). There was a poorly defined surrounding red zone. No necrosis was present. The bite area was tender on palpation. Good capillary refill was noted in the nail beds. The right ankle was noted to be warm compared to the left. The right calf was tender but not tense on palpation.

He was admitted to the hospital for treatment of secondary cellulitis. The child was placed on intravenous fluids and intravenous nafcillin 150mg/kg/day divided into 4 doses. He was also started on Gentamycin 7.5mg/kg/day divided into 3 doses. The area was elevated and warm compresses were applied. The child was given Advil and Tylenol for fever and discomfort control. Admission laboratory studies had a white blood cell count of 10,000, HCT was 35%, with 66% neutrophils, 5% bands, 15% lymphocytes, 9% monocytes, and 5% basophils. Westergren sedimentation rate was 42 with a normal of 1 to 10. Other blood chemistries were normal. A blood culture was collected.

X-rays of the right foot showed dorsal soft tissue swelling. No fracture, dislocation, or periosteal reaction was noted by this procedure. A bone scan was obtained and showed abnormal uptake of activity in the right leg, ankle, and foot through all three phases. The increased activity persisted and was still observed in delayed images 5½ hours after the injection. The findings were consistent with the child having periostitis. The blood culture was sterile. The child was discharged to home and

received 4 additional weeks of intravenous ceftriaxone 1 gram a day through a PICC line. Recovery proved uneventful and he continues to do well at follow-up.

Discussion

First aid measures are the same for all venomous snake bite victims.[1,2] A rescuer should splint or immobilize the bitten extremity in a functional position below the level of the heart and remove all constricting items. Keep the individual calm and inactive to minimize circulation. Do not apply ice, offer alcoholic beverages, or cut the bite area. Do not apply a tourniquet. Most snake bites occur within a short distance from emergency medical care, and the vast majority of bites are not immediately life threatening.[4]

The individual is transported as soon as safely possible to an emergency center. Have a description and size or, if possible, take the dead snake to the hospital for identification. Carefully collect it with a stick and place it in a bag. Dead snakes can bite by reflex.[2] If transported by ambulance an intravenous line should be started.

Each bite requires individual treatment with consideration of envenomation. Snake bite venom is composed of a mixture of toxins, including hemotoxins, cardiotoxins, and neurotoxins.[2] Pit viper venom is more likely to produce local tissue destruction through components that digest tissue. Cardiotoxic and neurotoxic effects occur with large quantities of envenomation. The toxic effects of coral snake venom are neurotoxic and cardiotoxic.[2]

Bites of smaller snakes are usually less serious, delivering less venom and less injury from the fangs. Copperheads produce mild venom and do not threaten the life of a healthy adult. However, children may react more violently to all venomous snake bites and require immediate assessment and intensive therapy.[5]

Death from venomous snake bites is a result of either delay in starting antivenin, or use of inadequate amounts of antivenin. However, before antivenin is administered, information needs to be known about the snake bite and its severity graded. It is important to determine if a snake bite actually occurred, what type of snake was involved, is it poisonous, and did envenomation occur.[2] Abrasions can be produced from a number of sources in the wild and be confused for a snake bite. Surprisingly for 20% of all poisonous snake bites no venom is injected.[2,4] An additional 15% to 40% of snake bites are trivial and do not need antivenin.[1,2] If antivenin is used correctly and in a timely way in the other 50%, morbidity and mortality could be significantly reduced.

Except for the coral snake, mojave rattlesnake, and exotic snakes, administration of antivenin is determined by grading the severity of the venomous snake bite[2]: (A) No envenomation: Fang or teeth marks are present. Sixty minutes after the bite, no swelling and no discoloration have occurred and there is minimal pain. (B) Minimal envenomation: Sixty minutes or more after the bite, possible discoloration, minimal swelling, and pain are present but do not increase in their severity. (C) Mild envenomation: Sixty minutes after the bite, ecchymosis, limb swelling with possible paresthesias, and systemic signs are present. Lab values are abnormal (CBC, platelet count, prothrombin time, partial thromboplastin time, renal function, electrolytes, fibrinogen, fibrinogen split products, sedimentation rate). Symptoms may progressively worsen over a few hours to manifestations of a moderate bite. (D) Moderate envenomation: Within thirty minutes after the bite, edema, ecchymosis, local cyanosis or paresthesia, weakness, nausea, or other systemic signs may develop. Lab values are abnormal. (E) Severe envenomation: The individual is ill. Signs and symptoms rapidly develop. Hypovolemic shock may be present. Coma may occur quickly if venom is injected intravenously.

Mild and minimal envenomation are treated by elevation of the extremity and close observation with monitoring every 4 hours.[2] This is important because symptoms may evolve over several hours following a bite. Antivenin is given intravenously for moderate and severe envenomation.[1,2,7] In the US the same antivenin is used for all snake bites except for the coral snake.[1] Antivenin neutralizes venom, blocking tissue damage and necrosis. Children may need more antivenin than adults because they have a lower resistance and are more susceptible to the toxic effects of venom.[1] Antivenin may be used to speed recovery and reduce pain and swelling.[2]

Antivenin is made from horse serum. Individuals may have an allergic reaction to antivenin. A skin test should be run to horse serum before antivenin is given.[7] A test kit is supplied with the antivenin. An allergic reaction would consist of erythema, hives or itching.[5] It may be followed by severe laryngospasm, bronchospasm, bradycardia, hypotension, unconsciousness, and even death.[7]

The occurrence of reactions may be sub-

stantially reduced by administering 1mg diphenhydramine per kg body weight 15 minutes before antivenin. Administering diluted antivenin at a slow rate or giving antivenin and diphenhydramine simultaneously also reduces the reaction rate.[7] If an allergic reaction occurs, stop the infusion immediately. It may be controlled with intravenous diphenhydramine and epinephrine. If a positive test skin reaction occurs, the physician must weigh if the patient will survive and not experience significant tissue damage without antivenin.[1,7] If the skin test is negative after 10 minutes, administer antivenin. It is best to have intravenous access in two different extremities, one for antivenin and the second for other products or medicine.

The starting dosage of antivenin is based on the severity of envenomation, with weight considered.[7,8] The first doses of antivenin for a child more than 100 pounds with minimal envenomation is 5 vials; moderate envenomation give 10 vials, and for severe 15 vials. Children less than 100 pounds should be given a 50% larger dose. A child bitten by the mojave rattlesnake should receive an initial dose of 10 vials of antivenin.

To reduce the occurrence of allergic reactions, the antivenin is diluted 1:4 with 0.5 normal saline. It is infused at a slow rate of 1.5ml a minute. The child is carefully observed and if no reaction occurs in 10 to 15 minutes the infusion rate is increased. The goal is to complete the infusion in 2 to 6 hours.[1,7]

If tolerated, the dose of antivenin is repeated every 2 hours until the progression of swelling has ended and all paresthesias and muscle fasciculations have ceased. The total dose required to neutralize the toxin and its effects is determined by a child's clinical response.[7]

Coral snake bites are treated differently than pit vipers. Coral snakes bite and chew, working their teeth into the skin. If they are pulled off quickly, envenomation may not occur. Venom may produce pain, paresthesias, nausea, vomiting, muscle tenderness, weakness, fasciculations, dizziness, euphoria, dyspnea, diaphoresis, confusion, diplopia and hypotension.[2] Systemic signs may be delayed for several hours and then progress. Abnormal reflexes and general paralysis indicate evolving toxin effect. Death, if it occurs, would be within 24 hours.[4] If the history indicates a coral snake bite has occurred and it has broken the skin, antivenin should be given. However, check with the regional poison control center first. The antivenin is not effective for the Arizona coral snake and is not used for this snake bite.

Coral snake antivenin is not as effective if given after symptoms develop. Early administration may prevent potentially fatal respiratory collapse from developing.[1,2,4] If treatment is delayed for individuals presenting with systemic symptoms of coral snake bite, antivenin and aggressive treatment are required with early intubation.[2] These individuals should be observed for at least 12 hours.

Children who receive antivenin for a venomous snake bite should be carefully monitored in either the emergency room or intensive care unit. Appropriate treatment should be started for complications such as anemia from hemolysis and coagulopathy and hypotension associated with decreased blood volume.

Fresh frozen plasma, plasma expanders, or fresh whole blood may be needed for these disorders.[1] Because of the nature of the venom injury crystalloid solutions do not correct shock from venomous snake bites. Vasopressor drugs should not be used until the intravascular fluid volume has been replaced.[7] Give oxygen if respiratory distress occurs. Codeine, meperidine, or morphine may be needed for pain control.[1]

Abnormal lab values should be monitored until normal. Wound care for bites is the same as for second degree burns. If blebs or bullae develop in the edematous area, surgical debridement is performed after the third day when the risk of significant bleeding is reduced. This area also would then be treated similarly to a second degree burn.[7]

Tetanus prophylaxis and immune status need to be considered. Corticosteroids should be given if serum sickness develops.[7] Prednisone (1mg/kg/day) is given until the pruritus and urticaria have been resolved for 24 hours. Then the dose of steroid is tapered over 72 hours.

References

1. Russell FE. When a snake strikes. *Emerg Med.* 1990;22:21-43.
2. Lichtenhan JB. Emergency management of poisonous snakebites. *Phys Sport Med.* 1995;23:72-88.
3. Parrish AM, Diekroeger MS, Hall HK. Counting California's snakebites. *Calif Med.* 1964;101:352-357.
4. Kunkel DB. Treating snakebites sensibly. *Emerg Med.* 1991;23:161-171.
5. Snyder CC, Knowles RP. Snakebites. Guidelines for practical management. *Postgrad Med.* 1988;83:52-75.
6. Hardy DL. Fatal rattlesnake envenomation in Arizona: 1969-1984. *Clin Toxicol.* 1986;24:1-10.
7. Wingert WA, Chan L. Rattlesnake bites in Southern California and rationale for recommended treatment. *West J Med.* 1988;148:37-44.
8. Parrish HM, Goldner JC, Silberg SL. Comparison between snakebites in children and adults. *Pediatrics.* 1965;36:251-256.

Primary Care Rounds

"The Middle-Aged Golfer"

Craig C. Davis, MD

A 56-year-old white male comes to your office in the summer after a particularly hot and humid week. The patient describes the following events in his own words. He was on the third hole and had just hit a 250 yard tee shot down the center of the fairway. After teeing off, he climbed into his electric golf cart and rode to his ball down the fairway. Just after climbing out of the cart he felt dizzy. The next event he could remember was waking up on the grass beside the cart. Please answer the questions below.

1. What is the final common pathophysiologic mechanism for all causes of syncope?
2. The most important diagnostic test at this time is to obtain a more complete history. What other questions would you ask your patient and why?
3. What specific areas of the physical examination would you want to assess?
4. Would you order any simple in-office ancillary tests?
5. How would you decide what further diagnostic tests to order and whether or not to admit the patient?
6. What would you tell this patient regarding the operation of an automobile?

Discussion and Answers

1. The final common pathophysiology of syncope is a reduction in cerebral blood flow below a level to sustain consciousness. This can be caused by:
   1. Arrhythmias — fast or slow
   2. Vasomotor mechanisms
      — vasodepressor or vasovagal
      — orthostatic
      — situational: micturition, cough, defecation, swallow
      — carotid hypersensitivity
   3. Severe flow obstruction including advanced pulmonary hypertension, PE, AS, HOCM, intracardiac tumor
   4. Cerebrovascular disease
      Cerebrovascular disease is a rare cause of syncope. I frequently see this considered and searched for near the top of the list on the inpatient service. Routine TIAs and CVAs are not associated with syncope unless the vertebrobasilar system and brainstem are involved or there is massive bihemispheric ischemia. Occasionally subclavian steal syndrome can be associated with syncope. Carotid duplex scanning and CTS/MRIs of the head are therefore rarely indicated in the work-up of syncope.

      The specific causes of syncope vary from study to study.

      This is expected since the causes of syncope in a population will vary depending on:
      (1) The age of the population. For example, younger populations — more vasodepressor cases, older populations — more cardiac cases. Outpatient population — more cardiac, orthostatic cases.
      (2) The source of the cases. For example, CCU population — more orthostatic, situational, vasodepressor cases.
      (3) How one defines a definitive diagnosis. For example, most testing, if positive or negative, only increases or decreases the probability of any one cause being *the* cause in a given patient. It is exceedingly rare that we document a cause in a patient by catching the etiologic event while the patient experiences the syncope. Therefore, when reading the literature, be careful to read how the researchers defined a positive EEG or EPS and then assigned this as the cause for the syncope in a given patient.

2. The first step is to determine what happened right *before, during,* and *after* the syncopal episode. Patients will often use the word dizzy when they mean lightheaded, unsteady without true vertigo, or when they have true vertigo. Be sure you are dealing with true syncope or near

Dr Davis formerly was Assistant Professor of Medicine and Director of Prime Clinic at the VAMC in Louisville.

syncope and be careful about what the patient is really trying to say.

1. *Before:*
   - — Fluid status/environment (probably hot/humid in Augusta in the summer, sweating, etc)
   - — Drugs may cause orthostasis, arrhythmias, anaphylaxis, hypoglycemia, etc; and don't forget ETOH
   - — Presyncopal symptoms: nausea, sweating, light-headed, palpitations, chest pain, vertigo, diplopia, paresis, aura
   - — Activity: bedrest/posture change associated with osthostasis, exercise may induce arrhythmias; micturition/defecation/cough/swallow; postprandial orthostasis is relatively common in the elderly; turning of the head/collar in relation to possible carotid hypersensitivity
   - — Possible stimulants for seizures: stopped meds, bright lights, etc
   - — Emotional state
   - — General: Does the patient have significant cardiac, pulmonary, cerebrovascular disease? Is there a disease or other reason to be orthostatic, etc? Prior syncope or near syncope prior evaluations? Knowledge of these factors will change the pretest probability of different explanations for the syncopal event.
2. *During:*
   Was it witnessed? If so, always question the witness if possible — seizure activity, duration, focal neuro signs, postictal confusion or paresis, loss of bowel or bladder control, drug/ETOH use (the patient may not always be truthful). (Of course, ask the patient these questions as well)
3. *After:*
   - — Postictal confusion?
   - — Focal neuro signs?
   - — Injuries from the event?
   - — Cardiac, pulmonary, orthostatic, glycemic or other important symptoms?

Let's go back to the case for a minute. Suppose further history revealed the following information. In each scenario, consider how your evaluation after the history might be directed.

Scenario A:
The patient says he has no PMH, he felt fine except he had a 24 hour gastroenteritis the day before. He had two beers before playing golf, it was 1:00 PM, he was sweating, no aura/no loss of bowel or bladder control/no postictal state occurred, and he had just changed posture as in the case description. No cardiac or pulmonary disease or symptoms are noted. What's your best guess as to the cause of the syncope? What other testing is needed? Would you hospitalize the patient?

Scenario B:
The patient says he has CAD, he is status-post PTCA to the LAD 6 months ago. He has been getting increasing chest pain in the last month and had some pain the morning of the golf game. They had started play at 8 AM, it was 75 degrees, he had taken his usual isosorbide, diltiazem, and ASA that morning at 6 AM, no ETOH was involved, and he recalls his heart pounding just before he lost consciousness. Now what would you be concerned about? Would this history change your diagnostic approach compared with Scenario A; would it change your mind on whether or not to hospitalize the patient?

The History Is the Key to the Diagnosis and Further Decision-Making

3. The physical examination should focus on key areas most likely to help in establishing a diagnosis.
   - — Blood Pressure: careful routine blood pressure measurement should be carried out. Orthostatic vital signs should also be measured. If you suspect orthostasis enhanced by drug or meal effects, you may want to measure orthostatic vital signs when a medication is having a peak effect or 30-60 minutes after a meal.
   - — Cardiac: carefully assess all pulses to detect vascular disease, arrhythmias, or a discrepancy in arm-arm or arm-leg pulses (why?), thorough heart exam for evidence of pump dysfunction or valvular disease.
   - — Neurologic examination: detailed to assess for signs of seizures and signs of processes that might cause seizures.
   - — Pulmonary examination/leg exam: to detect possible, DVT, PE, and severe pulmonary hypertension.
   - — Carotid sinus massage: must be done carefully with resuscitation equipment and monitoring. Technique and interpretation of results not well standardized, results may be nonspecific, and sensitivity is not known. Should not be a routine part of the examination.

4. The ECG may be helpful in guiding further work-up, but is rarely definitive. The diagnosis is established by the ECG in less than 5% of cases. An ECG consistent with organic heart disease will increase the probability of a cardiac source. Electrolytes may be helpful if one is considering volume depletion or arrhythmias as a cause. An ABG would only rarely be helpful.

5. Tests that may be useful in the work-up of syncope include tilt-table testing, EEG, Holter monitoring, Cardiac event monitoring, Electrophysiologic testing, Echocardiography, and Psychiatric Evaluation. Cerebrovascular studies and brain radiology will rarely be helpful and I believe are grossly over requested. In any given case, it is unusual that you need all tests and the "shotgun" approach is *never* indicated or helpful, and *always* very expensive. Regarding hospitalization — it depends on the suspected cause. For example, in Scenario A above, it sounds like orthostasis, and no other work-up is indicated. Treatment would consist of fluid replacement and taking it easy for a day or two. In Scenario B, the patient needs to be admitted with a diagnosis of crescendo angina with suspected arrhythmia.

6. Common sense answer: If you believe operating a motor vehicle would be unsafe for the patient and/or the public, you should tell the patient not to drive, document this in the chart, discuss with any relatives if possible, and consider notifying the motor vehicle division if a prolonged course is anticipated. When in doubt, err on the conservative side.

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I've Had a Good Run!

Tonight's a trifle chilly and the stars are very bright
A heavy dew is falling, but the tent is rigged alright
You may rest your bones `til morning and if you should chance to wake
Give me a call about the time daylight starts to break.

— Harry H. Morant

"Breaker" Morant is to be shot by firing squad at sun-up. He has been convicted of trump-up charges of shooting prisoners of war. Lord Kitchner made the policy of taking no prisoners, but the order was verbal and no record was kept, hence there was no accountability.

Friends of the court martial are sympathetic towards Morant and one of them offers him a horse on which to escape and he is told that the guards are asleep.

Morant demurs the offer, stating "I've had a good run." He hints there is nothing for him in England or Australia if he should get away. At daybreak, he is executed.

The above story is true and it is a bit more complicated than I indicate, but it presents a nice segue into my retirement and my own "I've had a good run." Of course there is no one, as far as I know, waiting to shoot me at sun-up.

As I hang-up thirty-nine and one-half years of medical practice, there is a virtual roller coaster of emotions and of loss and gain. I shall certainly miss the patients and their individual personalities. And I shall miss medicine and the challenges of diagnosis and therapy. I shall not miss the current interference from insurance companies, Medicare, hospital discharge planners, and now hovering on the horizon, capitation.

Neither will I miss the occasional difficult patient who wants to "drive the bus" but also wants me to write 15 new prescriptions for himself and spouse to mail off to a pharmacy in Texas. Or how about the obese lady who comes in for a blood pressure check, but she is wearing a blouse with sleeves so snug, it will take a general contractor and crane to get the fabric above the antecubital fossa just to apply the cuff.

I have had at least one self imposed inviolable rule. I have never, ever listened to a heart or a set of lungs with the stethoscope applied to a shirt or other clothing. I have insisted that the diaphragm goes on bare skin. On occasions, I must admit, I have had to snake down the stethoscope from above in ladies who are wearing a Peter Pan collar with no accessible zipper or button in the back.

I shall miss the doctor's table in the physician lounge where camaraderie is rampant and medicine so rarely discussed.

I shall not miss the daily reception of notices from nursing homes that want a signature that they have reported to me either a microscopic skin tear or a plethora of bowel movements.

I shall miss informative medical meetings where my younger colleagues are making case presentations of new therapy of old diseases, or even an occasional new disease complex.

I shall not miss the midnight call from the emergency room of the presence of a patient, who for the life of me I cannot recall, that is admitted as a "short stay" because of vague unexplained symptoms. Do I get up and get dressed, see the patient, and put a note on the chart and return home comfortable? Or do I stay in bed, hope everything will be "alright" until morning, but have a fitful night of insomnia and worry?

And what to do with my spare time? I have had retired confreres tell me they are so busy they are surprised they had time to practice medicine. Others say time hangs heavy and finances run thin. Sure, I could play plenty of golf; plenty of bad golf. My game is so poor I may run off what friends I have left. How many times have I heard, "Thanks Milt, but we have

a full threesome"?

I end this treatise with a quote from the book "Goodbye Darkness" by William Manchester. It reflects some beliefs and philosophies that I have tried to emulate. It goes thus:

> . . . "Wickedness was attributed to flaws in individual character, not to society's short comings. To accept unemployment compensation, had it existed, would have been considered humiliating. . . . Debt was ignoble. Courage was a virtue. Mothers were beloved, fathers obeyed. Marriage was a sacrament. Divorce was disgraceful. . . . You assumed that gentlemen always stood and removed their hats when a woman entered a room. The suggestion that some of them might resent being called "ladies" would have confounded you . . . all this led you into battle, and sustained you as you fought, and comforted you if you fell, and if it came to that, justified your death to all who loved you as you loved them. Later the rules would change. But we didn't know that then. We didn't know." (*From GOODBYE DARKNESS by William Manchester. Copyright © 1979, 1980 by William Manchester. By permission of Little, Brown and Company [Inc].)*

So now I close the book on almost forty years of the private practice of medicine. I only hope I have served my patients and my fellow colleagues well.

I've had a good run.

Milton F. Miller, MD

PHYSICIANS BEWARE!

Dealing With Tax-Exempt Healthcare Organizations Can Be Hazardous to One's Financial Health

by James C. Seiffert, Esq

What Physicians Need to Know about the Internal Revenue Service's Intermediate Sanctions Before Transacting Business with Tax-Exempt Healthcare Organizations

Picture this — Dr Smith, a prominent physician intends to sell his private practice to a local nonprofit, tax-exempt hospital where he is a major admitter. As part of the sale, he agrees to become an employee of the hospital with salary and various fringe benefits which include both incentive and deferred compensation arrangements. In addition, he will continue to serve as a member of the hospital's governing board; the same board called upon to approve this transaction. On the surface, this business relationship looks no different than many others that have become commonplace in the healthcare field. Forced to respond to the increased financial pressures, both tax-exempt healthcare providers and physicians view this type of alliance as a "win-win" situation. However, with the recent enactment of a new section of the Internal Revenue Code ("IRC") both Dr Smith and the hospital officials must proceed with care or otherwise find themselves personally subject to certain penalty taxes.

The Taxpayer Bill of Rights 2 ("TBR2"), enacted by Congress on July 30, 1996, created a system of "intermediate sanctions" which operates to assess penalty taxes on individuals participating in transactions with tax-exempt organizations where the economic benefit obtained by the individual exceeds the fair market value of that received by the organization. Much of the impetus behind the creation of this statute arose out of the perceived violations of certain tax exemption standards by nonprofit healthcare providers such as hospitals, HMOs and physician clinics. In an effort to curtail such activity, the Internal Revenue Service (the "IRS") changed its approach; rather than seek to revoke the organization's tax-exempt status as it had in the past, it now focuses on the particular individuals involved in such transactions and assesses penalty taxes on those who are unjustly enriched at the expense of the tax-exempt organization. The enactment of this type of intermediate tax enforcement tool is likely to have a significant effect on the manner in which tax-exempt healthcare providers and physicians transact business with one another.

Overview of the Intermediate Sanctions

TBR2 created IRC Section 4958 which assesses penalty taxes in situations where either a tax-exempt charitable or social organization participates in an "excess benefit transaction." These penalty taxes apply retroactively to all excess benefit transactions occurring after September 13, 1995. Both the recipient of the excess benefit (ie, the "disqualified person") and the exempt organization's board of directors and/or officer(s) who approved the transaction knowing that it involved an excess benefit (ie, the organization manager[s]) will now be personally liable for the payment of the penalty taxes.

IRC Section 4958 applies to any transaction in which the economic benefit provided by the tax-exempt organization to the disqualified person exceeds the value of the services or other considerations received by it in the exchange. The term "economic benefit" is not defined anywhere in the statute but appears to cover only those benefits which have a measurable fair market value. Examples of transactions or financial arrangements in the healthcare field which will draw the scrutiny of the IRS include: (i) the acquisition of a physician's private practice, the receipt of practice support services, or the disproportionate risk assumed by a tax-exempt healthcare organization in a joint venture with physicians; (ii) compensation packages associated with physician recruitment or retention, including incentive compensations and deferred compensation arrangements; and (iii) revenue sharing transactions where the healthcare organization shares its future revenues with a private investor or service provider.

An "excess benefit transaction," which triggers the imposition of the penalty taxes, must involve both a disqualified person as well as an organization manager. A disqualified person is any one who, within a five-year period prior to the transaction, was in a position to exercise substantial influence over the affairs of the

organization. The term also includes a disqualified person's family members and any business in which the disqualified person owns 35% or more. In a break from prior IRS policy, physicians will not be classified automatically as disqualified persons under the law merely because of their status. It is only those physicians that are in a position to exercise substantial influence over the organization who will be subject to the tax. Physicians who are: (i) directors and officers; (ii) major admitters or revenue producers; (iii) representatives of a significant number of the medical staff or a key specialty; (iv) influential with major managed-care providers; or (v) major donors to the healthcare organization will likely be tabbed disqualified persons.

Organization managers, on the other hand, include officers, directors, trustees, and those with similar responsibilities. Titles, alone, do not automatically make one a manager, but rather, it is the individual's actual authority which is relevant. Consequently, only those individuals who regularly exercise general authority over implementing administrative or policy decisions will fall into the category of organization managers.

The penalty taxes assessed against disqualified persons are applied on a two-tier basis. The initial tax is 25% of the excess benefit made available to or for the use of such person. An additional tax of 200% of the excess benefit is assessed against the disqualified person if the excess benefit is not corrected within a specified period of time (ie, 90 days after mailing of a deficiency notice). Acceptable corrective measures include undoing the excess benefit to the extent possible (ie, repaying the money) and taking all other appropriate steps to put the organization back in a financial position, which is no worse than had the transaction been carried out under the highest fiduciary standards. This means that the disqualified person must return the excess benefit received or the organization will be required to take action to collect the excess.

Where the 25% tax is imposed on the disqualified person, a corresponding penalty tax is assessed against the organization manager(s) equal to the lesser of $10,000 or 10% of the excess benefit. However, unlike the disqualified person, an organization manager participating in the transaction must have *actual knowledge* that the particular transaction contains an excess benefit before a tax can be imposed. Actual knowledge will be found to exist where an organization manager negligently fails to ascertain whether the transaction was an excess benefit transaction. An organization manager may escape the tax where the individual establishes that his or her conduct was not willful and he or she exercised ordinary care and prudence in carrying out the individual's duties.

Analysis

A physician may find himself or herself on either side of a business transaction with a tax-exempt healthcare provider that could, potentially, result in the imposition of the penalty taxes under IRC Section 4958. All types of "insider" transactions will now be closely scrutinized by the IRS with the focus and ultimate liability on the participating individuals. Consequently, certain action can and should be taken contemporaneous with the particular transaction to minimize a physician's personal liability.

A physician who, as a potential disqualified person, finds himself or herself engaged in a financial transaction with a tax-exempt healthcare provider should, at a minimum, require written representations and covenants from the organization that it has taken all appropriate steps, contemporaneous with the transaction, to satisfy the elements of the rebuttable presumption of "reasonableness" available under IRC Section 4958. To secure this presumption, the organization must comply with the following: (i) the transaction must be approved by the members of the board of directors unrelated and not subject to the control of the "insider" physician; (ii) in approving the transaction, the board of directors must obtain and rely on contemporary, as well as appropriate, data for the purpose of comparing the particular transaction with similar transactions conducted by similarly situated tax-exempt and taxable organizations; and (iii) the board of directors must adequately document, in writing, the basis for its determination. This presumption is available for both compensation arrangements and valuations of property sold, purchased or transferred. If all three criteria are satisfied prior to closing the transaction, the penalty taxes can be imposed *only* where the IRS has sufficient contrary evidence to rebut the probative value of the data relied on by the parties. In evaluating the reasonableness of compensation or the fair market value of a transaction, the IRS is required to examine the particular transaction against comparable transactions entered into by both taxable and tax-exempt organizations. What this means is that a physician, for example, is not obligated to accept less money merely because he or she contracts with a nonprofit organization. All tax-exempt organizations that engaged in "insider" transactions between September 13, 1995, and January 1, 1997, are well advised to make a good faith effort to conduct a review of their transactions, and to do so with deliberate speed.

A physician may also want to consider, as a condition to the transaction, requiring the tax-exempt organization to indemnify him or her or, in the alternative, require the organization to purchase insurance to cover the potential liability in the event penalty taxes are assessed. However, if this approach is taken, one must

understand that any indemnification payment or insurance premium payment must be included as part of a physician's compensation from the start, and the physician's total compensation which now includes this additional payment must be "reasonable."

For the physician who serves in an executive capacity or as a member of the board authorizing these types of transactions, certain steps should also be taken to insulate him or her from personal liability. First and foremost, the tax-exempt organization should have in place a "conflict of interests" compliance plan specifically designed to minimize the personal exposure of those executives, board members and other persons potentially subject to the penalty tax. This plan should include the identification of all conflicts of interest and a procedure for approval of all insider business transactions and compensation decisions which incorporates the elements of the rebuttable presumption of reasonableness. With respect to the conflicts of interest plan, it should specifically address: (i) the disclosure of interested parties and the specific material terms of the transaction; (ii) a procedure for determining whether the financial interests of the interested parties result in a conflict of interest; and (iii) a procedure for sufficient recordkeeping. Once established, this policy must be distributed to all officers, trustees, and committee members with board-delegated powers. The organization should also be required to review whether its existing directors and officers insurance insures against the penalty taxes.

Conclusion

With the enactment of IRC Section 4958, physicians finding themselves on either side of a business transaction with a tax-exempt healthcare provider should make sure the proper procedures are in place to insulate them from the imposition of its penalty taxes. Both the disqualified person and the board member have a vested interest in seeing that the particular business transaction does not contain any improper or excessive economic benefits. To the extent physicians are not proactive in this regard, the penalty taxes of IRC Section 4958 could prove hazardous to their financial health.

Mr Seiffert practices law with the firm of Stites & Harbison, 400 W Market St, Suite 1800, Louisville, KY.

Surgical Management of Intrathoracic Goiter

I read with interest the communication to the *KMA Journal*, dated October 1997, titled, "Surgical Management of Intrathoracic Goiter," by Sibu P. Saha, MD, et al. I must say that I disagree with most of his indications for removal of a substernal goiter and the procedure proposed.

He reports 18 cases of intrathoracic goiter, 12 which were substernal and 6 in the poster mediastinal position. He recommends substernal goiters be removed through a midline sternum-splitting incision and the posterior goiters be removed through a right thoracotomy. It should be noted that 4 of his patients were asymptomatic at the time of surgery, and it is unclear whether these patients had goiters in the anterior or posterior position.

Substernal goiter is not really a rare entity. I certainly agree with Dr Saha and co-authors that both the anterior and posterior goiters represent an extension from the neck. Sole blood supply to the goiter from the mediastinum (aorta) is very rare. Contrary to what is stated in his communication, a diagnosis of the situation can be made in 90%+ of the time on the basis of *physical examination* and with plain x-rays of the chest. Physical examination is not mentioned in the article at all. Attention is directed to specialized procedures. A CT scan of the chest will support the diagnosis in a very considerable proportion of the patients.

The article states that carcinoma may involve at least 16% of cases. In my opinion and in the opinion of others in the literature, the potential for malignant degeneration is not considered significant enough to warrant the removal of all adenomatous goiters.[8] The literature that I reviewed, as well as the cases reported in this study and in my experience, show no removed goiter was carcinomatous.

Symptomatology as an indication for removal has become problematic. In my opinion, they should generally demonstrate some evidence of tracheal compression, as well as, perhaps, the dry, hacking cough described.[1-9] Certainly a goiter increasing in size on follow-up would require removal. In my experience, as well as that of others, these patients are frequently asymptomatic. The patients referred to me with this problem were initially evaluated by their private physicians and, because of an abnormal chest x-ray, possibly showing a mediastinal mass, they were sent to me for thoracic surgical opinion. In a number of the patients, the characteristic x-ray or CT scan or both, coupled with a good physical examination, usually led to a recommendation of no further treatment other than observation.

The most serious issue I have with the paper is the method of removal of a substernal goiter. It is almost universally accepted that the primary approach is through a collar incision[1-9] with mobilization and delivery of the gland through the thoracic inlet. A midline sternal-splitting incision was rarely needed. Literature would appear to support a collar approach even when a true mediastinal goiter is diagnosed[4] or the goiter be in a posterior position. Contrary to his statement concerning "morcellation of the gland," there was no need for this.[6]

It should be mentioned, and perhaps less importantly, that the thyroid tissue within the chest, particularly as pertains to the posterior distribution of a goiter, may be the only thyroid tissue the patient has, and removal of it may render him or her hypothyroid on medication for the rest of their life.[6,9] Hyperfunction as an indication for removal must be as rare as hen's teeth. Again, thoroughly adenomatous goiters, cervical in position, become large but very rarely malignant. Their removal involves symptoms of tracheal compression or cosmetic problems. It is quite likely the cosmetic problems predominate. Why should mediastinal goiters behave any differently than cervical goiters with regard to malignancy?

I believe the article does not represent the standard of care and management of this problem, especially with regard to the chosen surgical approach. In these days of "limited is better," I am rather surprised that the effective transcervical approach should be cast aside in such a manner. I would advise Dr Saha's group to refer such cases to a general surgeon familiar with both a conservative approach and the transcervical operation when indicated.

James H. Simrall, MD
5406 Navajo Road
Louisville, Kentucky 40207
502/896-6703

References

1. Hsu B, et al. Recurrent substernal goiter: Incidence and management. *Surgery*. 1996;120(6): 1072-1075.
2. Alvarez K, et al. Surgical treatment of cervico-mediastinal goiter. *Arch Bronconeumol.* 1997 Feb; 33(2):84-88.
3. Fadel E, et al. Intrathoracic goiter. 62 surgically treated patients. *Presse Med.* 1996 May;49(5):425-429.
4. Uematsu M, et al. A case of intrathoracic goiter. *Kyobu Geka.* 1996 May;49(5):425-429.
5. Sabiston. *Textbook of Surgery* 10ED 1972:646
6. Sabiston. *Textbook of Surgery* 15ED 1997:626-629
7. Swartz. *Textbook of Surgery* 1ED 1969:1642
8. Swartz. *Textbook of Surgery* 2ED 1974:1454-1455
9. Swartz. *Textbook of Surgery* 6ED 1994:664-665

Dr Saha replies:

We thank Dr Simrall for his interest in our recent article entitled, "Surgical Management of Intrathoracic Goiter." Dr Simrall has made multiple comments that are relevant to substernal goiter, but not to intrathoracic goiter. Fourteen patients presented with various symptoms, including shortness of breath, dysphagia, dry cough and respiratory failure. Four patients, who were asymptomatic, showed evidence of tracheal deviation and compression. We agree with his assessment that clinical examination coupled with CT scan could clinically diagnose a substernal goiter. However, true intrathoracic goiter is not amenable to clinical examination, such as palpation. CT scan is extremely beneficial in the diagnosis of both substernal and intrathoracic goiter. However, there is no substitute for tissue diagnosis. In his letter, he challenges the incidence of malignancy in adenomatous goiter. In his own reference in the Sabistan Text Book of Surgery (15th Edition, 1997), it is reported to show 4% to 17% incidence of carcinoma, however thought to be so only in surgical cases. He has expressed serious concern about the surgical incision. Again, his comments are very pertinent to substernal goiter and not for intrathoracic goiter. We also use collar incision for removal of substernal goiter. We would like Dr Simrall to revisit Page 1642 of the *Text Book of Surgery* (6th Edition, 1994) by Swartz. The last sentence of the paragraph on intrathoracic goiter reads, "often a full sternotomy is necessary."

Sibu P. Saha, MD, et al

IN REMEMBRANCE

Robert Joseph McCabe, MD
1921-1997

My friend and colleague Bob McCabe was born in Covington, Kentucky on March 19, 1921. He was a graduate of Covington Latin School in 1937, Xavier University in 1941, and the University of Cincinnati College of Medicine in 1944. After a year of internship at Cincinnati General Hospital in 1944-45, he served two years as a captain in the US Army Medical Corps during WWII. He then practiced general medicine in Covington for seven years followed by a residency in dermatology at University Hospital, Cincinnati, from 1954-1957.

Bob was a member of the Northern Kentucky Medical Society, the Kentucky, Southern, and American Medical Associations, the Cincinnati Dermatological Society, and the American Academy of Dermatology.

I first met Bob in 1956 while visiting the Cincinnati residency program. He invited me to attend the residents' journal review, and I was immediately impressed with his quiet scholarship and his grasp of dermatologic literature. He was far ahead of the times with his expertise in performing the Tzank test for diagnosing herpetic eruptions and in allergic patch testing of the skin.

Bob McCabe was a consummate practitioner of dermatology for over 40 years in Northern Kentucky. A legion of loyal patients loved him because of his integrity to their needs; colleagues admired him because of his integrity and commitment to sound medical practice. He epitomized traditional Hippocratic and Oslerian ethics and thereby served as a splendid role model for the many physicians who knew him.

The passing of this kind and gentle man leaves a great void in what is good in contemporary medicine, but his faithful and honest ministry to patients will abide and inspire for generations to come.

Bob is survived by his devoted wife Marilyn, three daughters, four sons, twelve grandchild, and one great grandchild. May the Lord comfort them in this time of bereavement.

Smith H. Gibson, MD
Covington, KY

Aroona Dave

To Promote Coalition Building Hand to Hand

"SAVE" our focus '97-'98 continues. "Hands Are Not For Hitting" and "I Can Choose" booklets are being distributed to K-3 children in 12 organized counties public schools and more. KMA PE Committee has taken the lead by contributing funds to purchase these. AMA Alliance fully supports this by giving substantial discount and printing. In addition to the financial support they are giving the project, the Public Health Commissioner's office also is distributing the materials to the schools through school health coordinators.

Trover Foundation, Family Advocacy Center, local Health Department of Hopkins County, Perry County, Pike County Domestic Violence Shelter, SMA Auxiliary are all very significant contributors to the project. Also in honor of all the volunteers at Ky PTA, where children come first, a contribution has been made.

"SAVE" is a national program that teaches children conflict resolution without resorting to violence. Alliance members can show that they truly care for the future of our children by being involved in this project — in their counties. This is a good PR for us and is good for our children. If we reach even 10 or 100 children through this program, it will make a big difference in stopping the violence!!

WE ARE IN THIS TOGETHER!

Tri-County Visit by
AMA Alliance Field Director
Molly Krafka
March 9th & 10th, 1998

I am really looking forward to upcoming event in March 9th & 10th, 1998. Molly O. Krafka is going to address Jefferson County Medical Society Alliance members and resident physician/medical student spouses on the subject of "Medical Marriage."

She will inform the Warren County and Daviess County members about "What is an Alliance?"

Fondly,

Aroona

Aroona

Molly Krafka

Angela DeWeese

"Alliance members and their guests find this day to be a most profitable way to support the medical profession....The information is designed to broaden our knowledge of how legislation is developed and how government works."

KMA-KMAA Legislative Day at the Capital

The Kentucky State Legislature meets in regular session once every two years. Whether Kentucky citizens are passive or active in regard to their government, there always seems to be a sense of anticipation and expectation about issues and laws which affect all of us when the Legislature is in session. Especially in the field of medicine, there is a feeling of urgency about many issues which need to be addressed. Insurance reform, patient protections, physician reimbursements, standards of care, and licensing and professional regulations are just a few of the issues facing lawmakers.

For the past several years Alliance members and their spouses/guests have been privileged to be part of the KMA-KMAA DAY in Frankfort. This year's event on January 28 at the Capitol Plaza Hotel proves to be another educational and worthwhile experience. At the time of this writing, the scheduled speakers include Governor Paul Patton, Senate President Larry Saunders, Speaker of the House Jody Richards, Senator Dan Kelly, and Secretary of Human Services John Morse. Doctors Bill Monnig and Wally Montgomery, Alliance representatives, and others are also on the agenda. Afternoon time will be free for visiting legislators or attending House or Senate Sessions.

Alliance members and their guests find this day to be a most profitable way to support the medical profession. The format is easy to follow. The presentations are not long. The information is designed to broaden our knowledge of how legislation is developed and how government works. The day begins in the early AM, but a continental breakfast and a seated luncheon give everyone time to visit and review the day's events. Both of the meals are complimentary and are a gracious way for KMA to show appreciation to the Alliance for their support in the year's legislative endeavors.

Permit me to close by thanking all County Legislative Chairpersons for their support this year. Special thanks to Joan Slattery Burke of Lexington who has worked diligently for our Alliance as Phone Bank Chair.

Also, I once again want to thank Governor Paul Patton and his wife Judi for taking part in the photo session with Alliance members after Governor Patton signed a proclamation naming October 8, 1997, SAVE DAY IN KENTUCKY. Their efforts to stop the violence in our state and nation are appreciated by all Kentuckians.

Have a wonderful 1998. Let's keep working for GOOD GOVERNMENT!

Angela DeWeese
Legislative Affairs Chairman

1998

MARCH

9-13 — Cardiology at Cancun 1998, sponsored by the American College of Cardiology. Contact: Extramural Programs Dept, American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699; phone 800/253-4636, ext 695; fax 301/897-9745.

22-24 — Spirituality Healing in Medicine — IV & V, sponsored by The Institute of Religion, Texas Medical Center, The Westin Galleria Houston, Houston, TX. Contact: Harvard Medical School, MED-CME, PO Box 825, Boston, MA 02117-0825; phone 617/432-1525; e-mail: hms-cme@warren.med.harvard.edu.

APRIL

24-May 1 — 57th American Occupational Health Conference, John B. Hynes Veterans Memorial Convention Center, Boston, MA. Contact: AAOHN in Atlanta, 404/262-1162 X110, and ACOEM in Arlington Heights, IL, 847/228-6850 X152.

28-May 3 — Back to the Future...a Renaissance in Endocrinology (Seventh Annual Meeting and Clinical Congress of the American Association of Clinical Endocrinologists and the American College of Endocrinology Induction of Fellows), Buena Vista Palace, Orlando, FL. 44 hours Category 1 CME. Contact: AACE, 904/353-7878; FAX 904/353-8185; on-line — http://www.aace.com.

JUNE

23-July 5 — "American Medicine in a Critical Perspective" — Norwegian Fjords Study Cruise aboard Holland America Line's ship, the ms Rotterdam VI, jointly sponsored by the Florida Medical Association and Continuing Education, Inc. Twenty (20) hours Category 1 CME activities. Contact: 1/800/926-3775.

25-28 — 1998 CMRS Annual Society Meeting Clinical Magnetic Resonance Society, Disney's Yacht & Beach Club Resorts, Lake Buena Vista, FL. Contact: phone 800/823-2677 or 513/221-0070; fax 513/221-0825; e-mail: cmrs@one.net.

Stephen Z. Smith, MD

Milton F. Miller, MD

Journal Editors Honored by House of Delegates

In 1997, Assistant Scientific Editor Stephen Z. Smith, MD, and Assistant Editor Milton F. Miller, MD, each celebrated his 20th Anniversary as a member of the Editorial Board of *The Journal of the Kentucky Medical Association.*

In recognition of their long and distinguished service to the profession, the Association, and the Editorial Board, the 1997 KMA House of Delegates honored each with a special tributary resolution. The resolutions were read before the House during the 1997 KMA Annual Meeting, and each was adopted as written.

Both of these exemplary Editors are recognized for their fine editorials. Dr Smith also serves as Book Review Author and has contributed many concise, insightful reviews. Dr Miller has been widely acclaimed by several publications which have reprinted many of his editorials.

The devotion and outstanding efforts of Drs Smith and Miller, along with the contributions of their Editor colleagues, has ensured the integrity of *The Journal* as a vehicle for outstanding articles to improve the scientific and medical knowledge of Kentucky physicians. During the tenure of these Editors, *The Journal* has won numerous awards, and we are grateful for their many contributions.

In December 1997, Dr Miller announced his retirement from the active practice of medicine, and, alas, his resignation from the Editorial Board. (See his editorial on page 63 of this issue.) The Kentucky Medical Association, Editor A. Evan Overstreet, MD, and the Board and staff of *The Journal* wish Dr Miller a happy and productive retirement.

Actions of Reference Committee on Amendments to Constitution and Bylaws

AMA Interim Meeting, December 1997

The AMA has just celebrated its 150th as the voice of organized medicine in the United States. I have had the privilege to serve as your alternate delegate to the Reference Committee on Amendments to Constitution and Bylaws. It is imperative that the work of the AMA be forwarded to the Kentucky Medical Association members. My goal today is to share with you some insights which came before my reference committee in December 1997.

This committee deals with issues of how the AMA does its daily business and how the AMA conducts the annual and interim meetings. Therefore, one of the adopted reports as amended asks that a simple majority in the Official Call of voting members of the House of Delegates shall constitute a quorum. This will allow the House of Delegates to proceed with the business of the House even if the total number of voting members present should drop below the present rule of 200.

A highly debated issue was financial incentives and the practice of medicine. All physicians would agree that if financial incentives encourage efficient practice patterns consistent with ethical and scientific standards of care, then they are both appropriate and timely. However, there is the potential for all incentives to extend their scope of influence beyond basic practice trends to affect individual clinical decisions. The practice of medicine requires physicians to be free of financial conflicts that can affect clinical objectivity to the detriment of individual patient advocacy. It is critical for the profession to establish limits on the use of incentives in order to preserve the ability of physicians to fulfill their obligation to each patient. The Council on Ethical and Judicial Affairs affirms that the primary responsibility to inform patients of the financial incentives that could impact on the level and type of care they receive should be assumed by the health plan. However, the Council further stated that physicians should be prepared to discuss with patients any financial arrangements that could impact patient care.

These are just a few of the important issues discussed and actions taken at the 1997 AMA Interim Meeting.

Baretta R. Casey, MD
AMA Alternate Delegate

Reference Committee on Amendments to Constitution and Bylaws

ADOPTED

1. Board of Trustees Report 21 — Specialty Organization Representation in the House of Delegates — Recommendations adopted and report filed.
2. Council on Constitution and Bylaws Report 1 — Responsibility for Planning Activities of the American Medical Association.
3. Council on Constitution and Bylaws Report 2 — Speaker and Vice Speakers of the House of Delegates — Tenure.
4. Council on Ethical and Judicial Affairs Report 2 — Patenting the Human Genome.
5. Council on Ethical and Judicial Affairs Report 3 — Ethics Consultation.
6. Council on Ethical and Judicial Affairs Report 6 — Subject Selection for Clinical Trials.
7. Resolution 3 — Restrictive Covenants.
8. Resolution 6 — Calendar Year Terms for AMA — YPS Delegates and Alternates.

ADOPTED AS AMENDED OR SUBSTITUTED

9. Council on Constitution and Bylaws Report 3 — Definition of Quorum.
10. Board of Trustees Report 24 — Specialty Organization Representation in the House of Delegates — American Society of Cytopathology Compliance with 5-Year Review Criteria.
11. Council on Ethical and Judicial Affairs Report 1 — Financial Incentives and the Practice of Medicine.
12. Council on Ethical and Judicial Affairs Report 5 — Sale of Non-Health Related Goods from Physicians' Offices.
13. Council on Ethical and Judicial Affairs Report 7 — Invalid Medical Treatment.
14. Resolution 4 — Professional Courtesy.

REFERRED

15. Council on Ethical and Judicial Affairs Report 4 — Physicians' Political Communications with Patients and Their Families.
16. Resolution 2 — Patient-Physician Relationship.
17. Resolution 7 — Definition of a Resident.
18. Resolution 8 — Principles of Medical Ethics — was not adopted.
19. Council on Constitution and Bylaws Report 4 — Nominations for Elected Councils.

KMA Board of Trustees — December Meeting

The KMA Board of Trustees met on December 17-18, 1997, at the KMA Building in Louisville.

KMA President, C. Kenneth Peters, MD, presented his goals for 1998: a successful legislative session, two regional trustee district meetings, and a strategic planning seminar. The first regional trustee district meeting is scheduled for April 22, 1998, at the Riverpark Center, Owensboro. A strategic planning seminar is scheduled for May 27-28, 1998, in Shakertown.

Donald C. Barton, MD, Senior Delegate to the AMA, summarized the 1997 AMA Interim Meeting in Dallas. Ardis D. Hoven, MD, Lexington, has been nominated for a position on the AMA Council on Medical Services; and Bruce A. Scott, MD, Louisville, is running for the Young Physicians Slot on the AMA Board of Trustees.

Additional reports were presented by William P. VonderHaar, MD, Secretary-Treasurer; William B. Monnig, MD, Chair, KEMPAC Board of Directors; Richard F. Hench, MD, Chair of the Kentucky Medical Insurance Company Board of Directors; Rice Leach, MD, Commissioner for Health Services; Mrs Aroona Dave, Alliance President; James B. Holloway, MD, Acting Medical Director, AdminiStar; and Danny M. Clark, MD, President, Kentucky Board of Medical Licensure.

A progress report on the Regional Partnerships was presented. Larry N. Cook, MD, Chair, Department of Pediatrics, University of Louisville School of Medicine, reported that start-up began in November in Region 3 with 43,000 enrollees, with another 18,000 expected in January. Over 500 primary care physicians and approximately 1200 specialists have signed contracts. James R. Bean, MD, Lexington, reported that Region 5 is operating with 71,000 enrollees at present and another 25,000 are expected to enroll by April 1. Approximately 400 primary care physicians and 750 specialists have joined the partnership in Region 5. Richard T. Heine, PhD, Manager, Medicaid Waiver Project, reported on developments in the remaining regions.

Robert R. Goodin, MD, Immediate Past Chair, KMA Physicians Plan, Inc, reported that the KMAPP Board of Directors, at its meeting on October 30, 1997, recommended that efforts to develop a KMA-sponsored managed care product be discontinued as a result of a survey conducted by Ernst & Young, which indicated that financial and business barriers made such a venture unfeasible. The KMAPP Board recommended that KMAPP continue with new focus areas such as a managed care support service, leadership courses for physicians, and managed care seminars.

The Board adopted Agenda B to implement all actions of the 1997 House of Delegates.

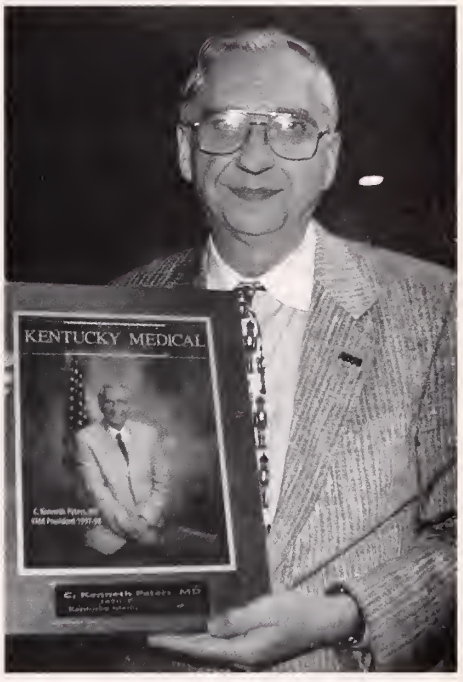
Two new committees, the Ad Hoc Committee on Alternative and Unconventional Medicine and the Ad Hoc Committee to Recommend a Section on International Medical Graduates were appointed. Kenneth R. Hauswald, MD, Ashland; Eugene H. Shively, MD, Campbellsville; and Robert C. Hughes, MD, Murray, were appointed to the KMIC Board Nominating Committee.

Legal Counsel updated the Board on the federal health benefit plan for mail carriers and lawsuits challenging Kentucky's Any Willing Provider law. The Any Willing Provider law is not being enforced, pending a decision in the suit.

Reports were given by the Committees on National and State Legislative Activities, the Public Education Committee, Committee on Medicaid Managed Care, Ad Hoc Committee on Faculty Membership, Continuing Medical Education Committee and the Committee on Child and School Health. The first Fraud and Abuse seminar, recommended by the Committee to Investigate Changing Trends in Medicine, is scheduled for February 5, 1998, at KMA Headquarters.

It was noted that the 1998 Annual Meeting will be held in Louisville September 20-24. The theme for the meeting is "The Team Approach to Healthcare: The Physician's Role."

The next meeting of the KMA Board of Trustees was scheduled for April 8-9, 1998, at the KMA Building.



KMA President C. Kenneth Peters, MD, was presented a Journal plaque commemorating his inaugural issue.

PEOPLE

Peter Hasselbacher, MD, professor of medicine and the first faculty fellow in the University of Louisville's partnership with the Kentucky Center for Public Issues, has been selected as one of six Robert Wood Johnson Health Policy Fellows nationally.

Lt Governor Stephen L. Henry, MD, was the recipient of the 1997 Mary C. Bingham Land Conservation Award given by the Future Fund Land Trust.

UPDATES

Team of Specialists Aids Ukrainian Burn Victim

A 12-year-old Ukrainian boy with severe burns covering half his body is being treated at the University of Louisville Hospital. During his approximate 10-week stay in Louisville, the patient, Ruslaan Litvinchuk, will receive extensive reconstructive surgery and physical therapy. He was injured when his clothes, which had been soaked in gas by other boys, caught fire.

Ruslaan's trauma physician, Ikram Mzoughi, MD, and a translator, Miriam Useinova, accompanied him to Louisville. During their stay, Dr Mzoughi will work as a fellow at U of L Hospital to learn the latest techniques in treating severe burn victims. U of L's burn unit treats patients suffering from second- and third-degree burns, smoke inhalation, chemical burns, and electrocution injuries.

A team of specialists has volunteered to treat Ruslaan at no charge. In addition, U of L Hospital and Frazier Rehab Center will make their facilities and staffs available at no charge. Caritas Health Services donated air fares to bring the three here and return them home. The medical team that will evaluate and treat Ruslaan includes:

— **Gordon Tobin, MD,** director of plastic and reconstructive surgery, medical school;
— **Benjamin Rigor, MD,** chair of anesthesiology, medical school;
— **Linda Gleis, MD,** assistant clinical professor and former director of the physical medicine and rehabilitation residency program;
— **Ronald Lehocky, MD,** assistant clinical professor of pediatrics; and
— **Anna Invenenko, MD,** a psychiatry resident working under the supervision of instructor **Sandra Elam, MD,** of psychiatry.

Louisville dentist **Shellie Branson, DMD,** has agreed to provide dental care.

Ruslaan came to the attention of the Jefferson County Medical Society's "Supplies Over Seas" program, a humanitarian effort that recycles medical supplies and drugs to some of the world's neediest communities. Among the organization's contacts is missionary Kathryn McKewen, a retired Leitchfield, Ky, nurse who established a clinic in Simferopol, Ukraine. McKewen relayed Ruslaan's plight to JCMS, which arranged for the youngster to be treated here.

Dr Tobin said that the boy's grafts have healed, his newly grown skin has begun to scar and shrink — typical side effects for burn victims. The effect has hindered movement of one eyelid, all limbs and skin on the neck and face.

Dr Tobin said he is excited that he and his colleagues will be able to train Dr Mzoughi in American burn treatment and trauma techniques. Dr Mzoughi then can take the knowledge back to Ukraine.

"Providing instruction on burn care has a tremendous impact in underdeveloped countries because the best burn care results from proper techniques, not technology," Dr Tobin said. "You don't need expensive equipment like heart-lung machines and laser devices to provide outstanding care."

The Jefferson County Medical Society Alliance arranged for Ruslaan, Ms Useinova, and Dr Mzoughi to stay at Hospital Hospitality House throughout their stay in Louisville. Alliance members and various local groups are assisting with hospitality, providing food, transportation, child care, clothing, incidentals, and companionship with peers throughout their stay.

Ruslaan Litvinchuk has been abandoned by his family, but a woman in Simferopol wishes to adopt him upon his return.

Kentucky Begins Surveillance of Occupational Burns

Occupational burns place a tremendous burden on the workforce, the medical community, and employers in Kentucky. In cooperation with the Kentucky Department for Public Health (KDPH), the Occupational Injury Prevention Program (OIPP) at the Kentucky Injury Prevention and Research Center (KIPRC) is establishing a statewide occupational burn surveillance system to identify causes and trends of work-related burns and monitor progress toward reducing these injuries. Funding for this project is provided by the National Institute for Occupational Safety and Health (NIOSH). Case identification began in January 1998 and will continue for 5 years.

According to a report from KIPRC, between 1994 and 1996, 52 workers died from burns, explosions or electrocutions. Most of these workers were less than 40 years old. In 1995, 1,195 Workers' Compensation claims were filed for work-related burns; 55 workers were hospitalized. The industries with the most claims were retail trade (34%) and manufacturing (23%). About 68% of the claims resulted in lost work time and 32% resulted in temporary disability. There

was an average of 6.4 days lost from work, and the total value for these claims was more than $2.6 million.

This initiative for a statewide burn injury surveillance system focuses on identifying risk factors associated with the workplace (eg, the task, environment, machine, worker) in order to develop injury prevention strategies. Using epidemiologic principles, the specific aims of the project are to:

- Identify the incidence of burns as an occupational injury (including thermal, electrical, chemical, friction, and radiation burns)
- Identify trends in burn cases quickly
- Develop and implement interventions to reduce the incidence of burn injury
- Evaluate the economic savings of interventions

Cases will be identified primarily through hospital burn units, emergency departments, the Kentucky Department of Workers' Claims, Kentucky Employers' Mutual Insurance, and death certificates.

KIPRC believes that members of the medical community, most notably private physicians and emergency department personnel, are in an excellent position to notify OIPP of work-related burn cases presenting for treatment; that only through the active involvement of health care providers can this project succeed in identifying and ultimately reducing the incidence of these traumatic injuries; and additionally, that practitioners will be an invaluable part of the project by disseminating prevention information to patients whose work histories indicate a potential for burn injuries.

KIPRC advises that data generated from burn surveillance activities will be disseminated to workers and employers, trade organizations, health professionals, public agencies, and the general public via news media.

Surveillance is a key component of occupational injury control. It provides baseline data and the opportunity to monitor trends. Over the next 5 years, the occupational burn injury surveillance project will enable KIPRC to identify risk factors for burn injury, implement effective prevention strategies, and reduce the incidence of these costly injuries in Kentucky.

For more information please contact Amy Scheerer, Project Manager, at 606-257-6712 or 1-800-204-3223.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Boyd

John Timothy Garner MD — FP
539 Eden Place, Ashland 41101
1994, W. Virginia U

Daviess

John D Robinson, MD — P
1000 Industrial Dr, Owensboro 42301-8715
1977, U of Missouri, Columbia

Fayette

Tony W Dotson DO — OBG
4745 Hartland Pkwy, Lexington 40509
1997, Chicago Homeopathic Med Col

Floyd

David J Jenkinson MD — ORS
485 E Dorton Blvd, Staffordsville 41256
1974, Queens U of Belfast

Green

Thomas A Castillo DO — OPH
262 Creason Lane, Greensburg 42743
1977, Chicago Col of Osteopathy

Jefferson

Paul A Atkins MD — IM
5030 Fertig Creek Rd, Floyd Knobs 47119-9212
1992, Indiana U

Robert T Barowsky MD — OPH
2817 Eastwood Fisherville Rd, Fisherville 40023-9727
1980, U of Wisconsin

Ricky S Collis MD — AN
6613 Northridge Cir, Louisville 40241-6533
1992, U of Louisville

Tyrone L Daniels MD — C
1400 Twin Ridge Rd, Louisville 40242-3817
1983, U of Iowa

Dale S Horne MD — NS
6420 Dutchmans Pkwy Ste 190, Louisville 40205
1990, Washington U, St. Louis

Diana G Irvin MD — IM
1139 Cherokee Rd, Louisville 40204
1982, U of Kansas, Lawrence

Mary E Lacher MD — PD
7003 Shallow Lake Rd, Prospect 40059
1985, Creighton U, Omaha

McCracken

Yale R Smith MD — AN
2507 Broadway, Paducah 42001
1985, U of Dominica, Ross U

Mercer

Steven C Hall MD — FP
PO Box 9, Harrodsburg 40330
1988, Dalhouse U, Canada

In-Training

Fayette

Andrea S Kristofy MD — AN
Adam Wooten DO — P

Kenton

Corey Gallus DO — FP
David Frederick Lowe MD — FP
Michael P Minning MD — FP
Rhonda R Pfaff, MD — FP

DEATHS

Robert L. McKenney, MD
Falmouth
1925-1997

Robert L. McKenney, MD, a general practitioner, died August 29, 1997. Dr McKenney graduated from the University of Louisville School of Medicine in 1954 and was an active member of KMA.

David P. Edmundson, MD
Mount Sterling
1912-1997

David P. Edmundson, MD, a retired general practitioner, died August 31, 1997. Dr Edmundson was a 1936 graduate of the University of Tennessee College of Medicine and a life member of KMA.

Robert C. Smith, MD
Newport
1919-1997

Robert C. Smith, MD, a retired psychiatrist, died September 5, 1997. A 1945 graduate of the University of Cincinnati College of Medicine, Dr Smith was a life member of KMA.

Harold B. Graves, MD
Harlingen, TX
1911-1997

Harold B. Graves, MD, a retired OB-GYN, died October 6, 1997. A 1937 graduate of Homeopathic Medical College of Missouri, Dr Graves was a life member of KMA.

Robert J. McCabe, MD
Newport
1921-1996

Robert J. McCabe, MD, a dermatologist, died October 12, 1997. Dr McCabe was a 1944 graduate of the University of Cincinnati College of Medicine, and an active member of KMA.

Mario W. Cartaya, MD
Campbellsville
1914-1997

Mario W. Cartaya, MD, a retired general practitioner, died October 12, 1997. A 1947 graduate of the University of Havana School of Medicine, Dr Cartaya was a life member of KMA.

Daniel H. Boeh, MD
Ft. Thomas
1910-1997

Daniel H. Boeh, MD, a retired general practitioner, died November 13, 1997. Dr Boeh was a 1936 graduate of the University of Cincinnati College of Medicine and a life member of KMA.

Thomas F. Whayne, Sr, MD
Lexington
1905-1997

Thomas F. Whayne, Sr, MD, a retired preventive medicine physician, died November 18, 1997. A 1931 graduate of Washington University School of Medicine, Dr Whayne was a life member of KMA.

Lee A. Heine, MD
Louisville
1916-1997

Lee A. Heine, MD, a retired family practitioner, died November 29, 1997. Dr Heine graduated from the University of Louisville School of Medicine in 1960 and was a life member of KMA.

Jorge Matallana, MD
Louisville
1929-1997

Jorge Matallana, MD, a pulmonary diseases physician, died December 2, 1997. A 1954 graduate of National University, Dr Matallana was an inactive member of KMA.

Herman R. Moore, MD
Louisville
1920-1997

Herman R. Moore, MD, a retired general surgeon, died December 13, 1997. Dr Moore graduated from the University of Louisville School of Medicine in 1944 and was a life member of KMA.

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9000 Wessex Place, Suite 305
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Phone: 502/425-7761; Fax 502/425-6871

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Rural Kentucky Medical Scholarship Fund, Inc

The Rural Kentucky Medical Scholarship Fund is accepting applications from residents of Kentucky, who have been accepted to one of the state's accredited medical schools. The Fund offers a $12,000 loan for each year of medical school to a qualified recipient who is willing to practice and reside in a rural county in Kentucky for one year for each loan received. Repayment options include low interest rates for recipients practicing in rural areas and loan forgiveness for those practicing in areas of the state with critical needs. Counties considered to be rural and critical are determined by the RKMSF annually. The Fund is the oldest and most successful of its kind in the nation. The Rural Kentucky Medical Scholarship Fund has loaned approximately $4 million to over 600 medical students. The deadline date for filing an application is ***April 1, 1998***. Those interested in applying for a scholarship loan should contact the RKMSF Office at the Kentucky Medical Association Headquarters, 4965 US Hwy 42, Suite 2000, Louisville, KY 40222, or call 502.426.6200.

Are You Relocating to a Critical Area in Kentucky and Have Educational Debt???

The Rural Kentucky Medical Scholarship Fund, Inc offers an additional program to continue to address the problem of maldistribution of physicians — the Establish Practice Grant Program (EPGP). This program enables primary care physicians who are beginning a practice in a critical area of Kentucky in obtaining assistance in repaying educational debt.

The EPGP offers $10,000 per year to a licensed full-time physician who has practiced in a critical county of Kentucky as designated by the RKMSF. The EPGP is limited to five participants per year. The program currently has two vacancies for 1998.

If you are interested in additional information and an application, please contact the Rural Kentucky Medical Scholarship Fund, Inc EPGP office at 502.426.6200, or at 4965 US Hwy 42, Suite 2000, Louisville, KY, 40222.

RATES AND DATA

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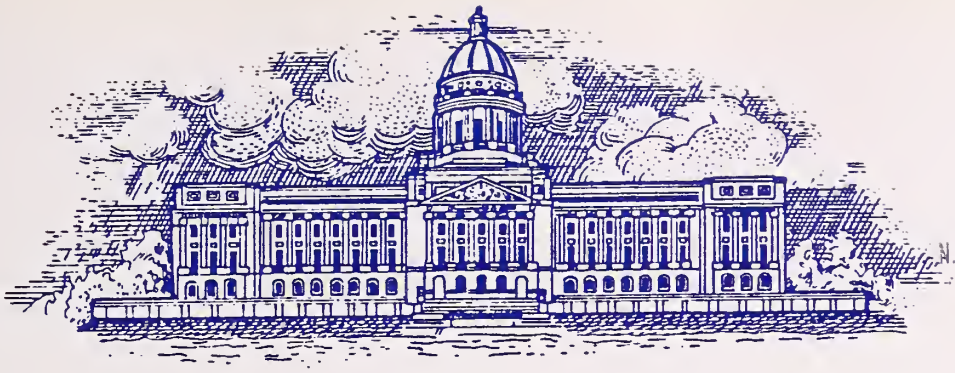

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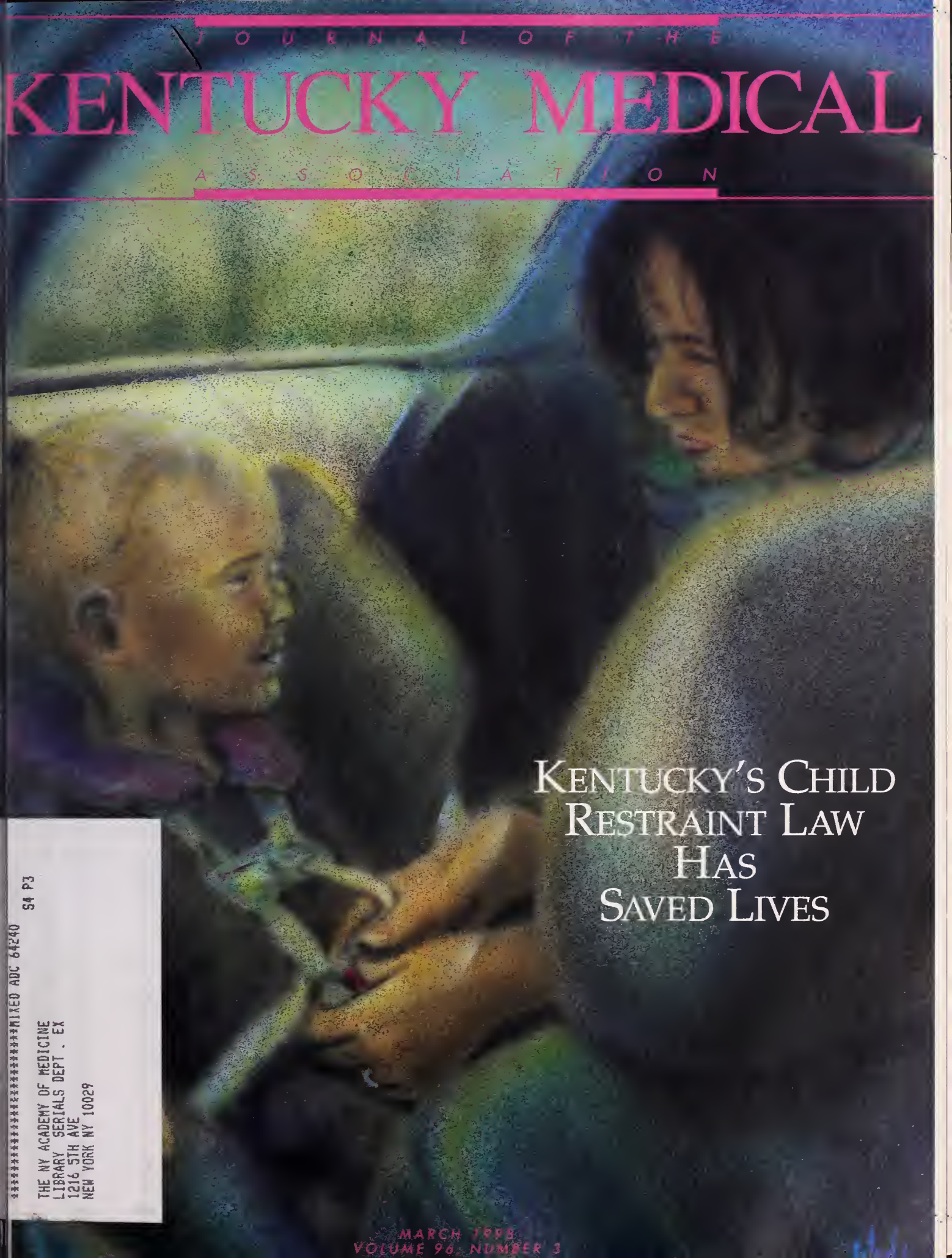

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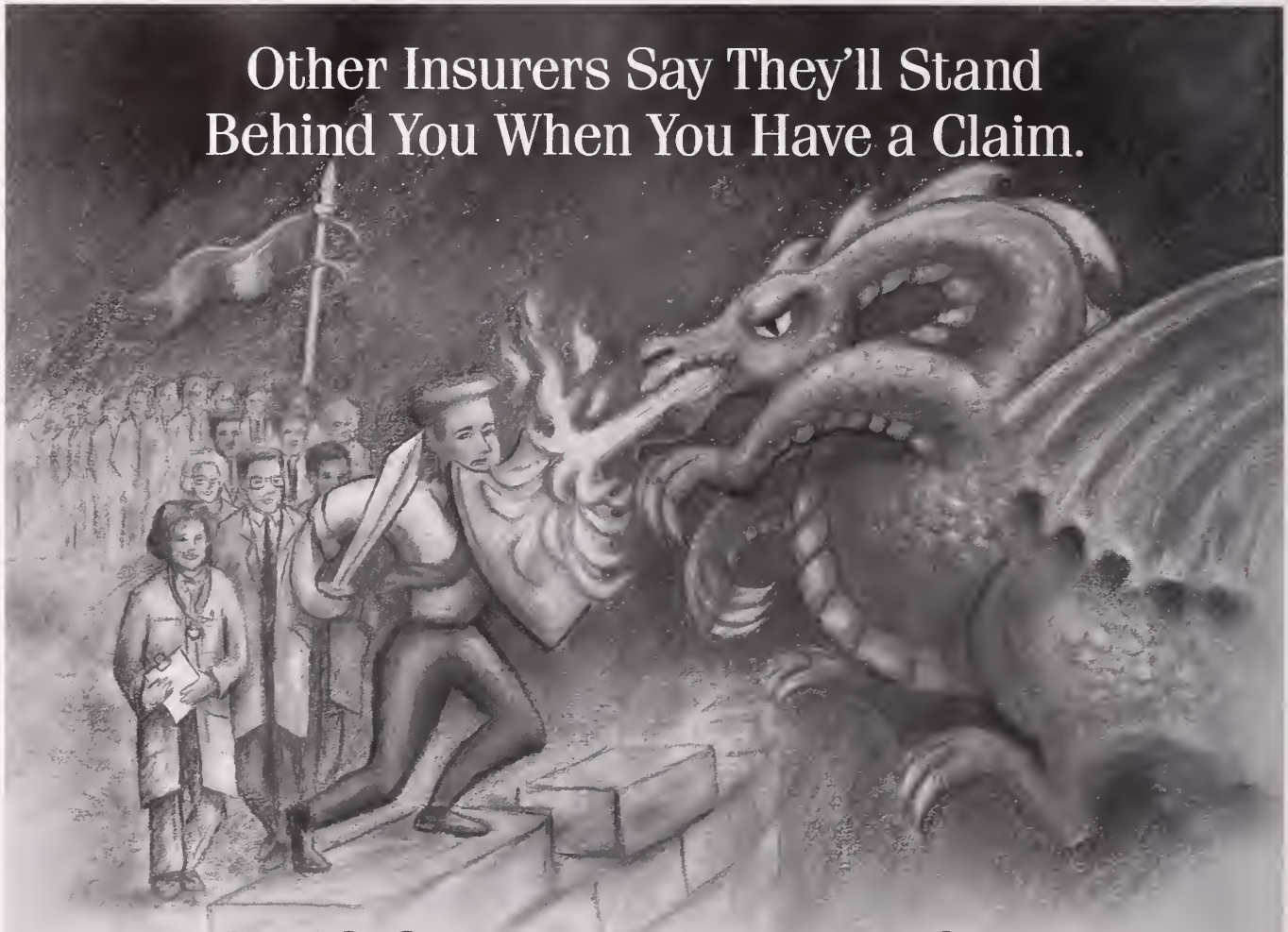

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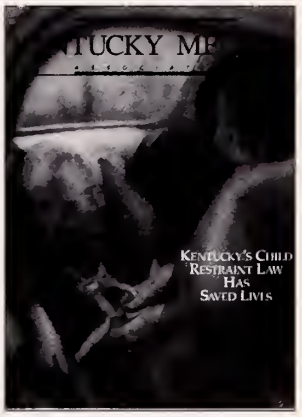

COVER:
Despite the foct thot oll 50 states ond the District of Columbio have child restroint lows in effect, injuries sustained in motar vehicle croshes continue ta be the leading couse of death and disobility omong children. This report provides o comprehensive summory of dota on motor vehicle occupont death rotes omong children oged 0-4 over the past 20 years.

Artwork by Lee Wade of Eminence, KY.

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J. Gregory Cooper, MD

Avoiding Communication Gaps

The reporter from the *Courier-Journal* was asking for my perspective on the recent AMA-Sunbeam debacle. The AMA annual meeting this past December was dominated by this issue in which a contract was approved which allowed the AMA emblem to be attached to Sunbeam health care products. This violation of AMA policy resulted in the dismissal of four AMA staff members and the resignation of the Executive Vice President. The House of Delegates voted to support the policy of the AMA, to review all existing commercial relationships of the organization, and to appoint an investigative committee made up of members of the House.

As an alternate delegate to the AMA, I was able to hear the issue discussed on the floor of the House. The extent of the discussion was limited by the legal issues which have been generated. Detailed information, however, was made available for the delegates and alternates to review privately after receiving background information from an outside attorney involved in the case.

Apart from the strange evolution of this errant venture I was struck by how the organization was making every effort to insure that the representatives of the decision making body of the AMA were fully informed about this explosive issue. Obviously, this was damage control in a time of crisis, but the officers and the Board of Trustees were also trying to re-establish lines of communication which had been battered rather badly. Without open and honest communication between the hierarchy of the AMA and the membership of the House of Delegates there would be no chance of dealing successfully with the crisis.

As I attempted to describe this process to the reporter, I realized that this attempt to maintain lines of communication between the leadership and the members of the House was reflective of the ongoing concern that any organization should have regarding contact with its individual members.

In dealing with this crisis the AMA board and officers had a different perspective on the issues from the members of the House of Delegates. In fact, the House of Delegates appropriately voted to help realign the perspective of the officers and the board! Information had been transferred to the members and they gave their response. The divisive issue was on its way toward resolution.

It doesn't take a Sunbeam crisis to cause an information/confidence gap between various levels of organized medicine. As an alternate delegate I must try to communicate House of Delegate issues back to the KMA members and Kentucky physicians that I represent. The officers and board of trustees of the KMA must keep the members of the KMA informed about the evolution of issues that impact medicine. Those of us that serve as representatives to the KMA House of Delegates have to try to translate the actions of that body to the practicing physicians out in the state.

Physicians who are involved in the process of policy making come to understand the concepts which rule that process. There are rules of order for policy making bodies. There are constraints and parameters that exist in order to avoid chaos and anarchy. There is give and take in the process. There is negotiation, diplomacy, exchange and compromise. In establishing and maintaining order in the process we often find that the results are much slower in coming than we would prefer.

As physicians we seek the truth. When we see it ahead of us we want to excise immediately any obstacles that stand in our way. Patience is often not our strong suit in problem solving. Thus, the practicing physician is often frustrated by the circuitous route that defines policy making. Thus, we may be reluctant to join and support the organizations which determine medical policy.

Those of us who are active in organized medicine have a responsibility to maintain lines of communication with our colleagues. We must let them know that we are dedicated to shepherding the interests of medicine through the maze that is politics.

J. Gregory Cooper, MD
Chair, KMA Board of Trustees

NEWS FOR KENTUCKY PHYSICIANS

1998 KMA Legislative Seminar Attracts Overflow Crowd

KMA's biennial Legislative Seminar continues to be a resounding success. Several in an overflow, record-breaking crowd had to stand during the Seminar held in Frankfort on January 28. Those in attendance were eager to hear the latest on major issues of significance facing the medical community in the Commonwealth of Kentucky, and they were not disappointed.

Featured speakers were Lt Governor Steve Henry, MD; Dan Kelly, Senator/Senate Minority Floor Leader; Jody Richards, Representative/ Speaker of the House; George Nichols, Commissioner of the Department of Insurance; Bob DeWeese, MD, Representative; William Monnig, MD, KEMPAC Chair; Wally O. Montgomery, MD, Chair, Committee on State Legislative Activities; Angie DeWeese, Vice President, KMA Alliance; and John Morse, Secretary of the Cabinet for Health Services.

KMA's President Ken Peters, MD, President-Elect Don Stephens, MD, Secretary-Treasurer Bill VonderHaar, MD, and Board of Trustees Chair Greg Cooper, MD, presided.

Following the seminar, many of the attendees visited the Capitol and met with their Legislators to discuss issues of concern to Kentucky physicians. While KMA leadership and staff routinely meet with Legislators to represent your interests, nothing is more effective than communication from a constituent—YOU! Your participation and involvement in the legislative process are ESSENTIAL.

MAKE A DIFFERENCE—GET INVOLVED!

KMA

PLEASE TURN PAGE FOR A PICTORIAL OVERVIEW

L-R: Lt Governor Steve Henry, MD, and Commissioner, Department of Insurance, George Nichols.

L-R: Senator/Senate Minority Floor Leader Dan Kelly; Representative/ Speaker of the House Jody Richards; KMA Alliance Vice President Angie DeWeese.

Left: J. Gregory Cooper, MD, Chair, KMA Board of Trustees (L), is pictured with James R. Bean, MD, of Lexington. Above: Fayette County President John R. White, MD, and Fayette County Executive Vice President/CEO Carolyn Kurz.

Left: Wally O. Montgomery, MD, KMA Chair, Committee on State Legislative Activities (center), and his wife Gerry discuss the issues with John Cooper, KMA Legislative Consultant, and Don Chasteen, KMA's Director, Public and Governmental Relations (in background). Above, L-R: President-Elect Donald R. Stephens, MD, and Secretary-Treasurer William P. VonderHaar, MD.

KMAA President Aroona Dave (L) is pictured with Immediate Past President Ruth Ryan.

KEMPAC Chair William B. Monnig, MD (L), relaxed with KMA colleagues.

Above: KMA President C. Kenneth Peters, MD, talked with Representative Bob DeWeese, MD. Left: Dr Peters is pictured in a discussion with a colleague.

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Kentucky's Child Restraint Law Has Saved Lives:

A 20-Year Review of Fatalities Among Children (Aged 0-4) as Motor Vehicle Occupants

L.A. Goldstein, PhD; C.W. Spurlock, PhD

In 1995, 616 children under 5 years of age died as occupants in motor vehicle crashes (MVCs) in the United States. Of these 616 fatalities, an estimated 328 (57%) children were completely unrestrained in any kind of child restraint device (CRD).[1] Thus, despite the fact that all 50 states and the District of Columbia have child restraint laws in effect,[1] injuries sustained in MVCs continue to be the leading cause of death and disability among children.[2]

Likewise, one of the leading causes of death and disability among Kentucky children aged 0-4 is motor vehicle occupant injuries. In an effort to reduce the number of children killed or injured as MV occupants, Kentucky passed a law (KRS 189.125) in 1982 requiring that, "any parent or legal guardian of a child, forty inches (40˝) in height or less, when transporting his child . . . shall have such child properly secured in a child restraint system of a type meeting federal motor vehicle safety standards."[3]

This report provides a comprehensive summary of data on MV occupant death rates among children aged 0-4 over the past 20 years. An initial report published in 1985[4] presented child fatality data for 1970 through 1984, spanning time periods both before and after enactment of the child restraint law. The current report presents similar data obtained since 1984. The report also describes apparent trends in MV occupant death rates among children aged 0-4, discusses the possible long term effects of the child restraint law, and suggests other factors that may influence restraint usage rates.

Annual totals for the number of deaths among children aged 0-4 as MV occupants were obtained from the Kentucky Department for Public Health, Division of State and Local Health Administration, Vital Statistics Branch. Death rates were calculated per year based on population estimates derived by the Urban Institute at the University of Louisville. The death rates graphed in Fig 1 represent 3-year running averages of the annual death rates presented in Table 1.

From the Kentucky Injury Prevention and Research Center. Correspondence to Dr L.A. Goldstein, Kentucky Injury Prevention and Research Center, 333 Waller Avenue, Suite 202, Lexington, KY 40504-2915, (606) 257-6711 FAX (606) 257-3909, lagold@pop.uky.edu

Table 1. Deaths and Death Rates to MV Occupants Aged 0-4 Before and After Enactment of Child Restraint Law in Kentucky

7-Year Period *Prior* to Child Restraint Law				7-Year Period *Following* Child Restraint Law				Past 5-Year Period			
Year	Fatalities*	Population†	Death Rate	Year	Fatalities	Population	Death Rate	Year	Fatalities	Population	Death Rate
1975	21	276,000	7.6	1983	14	281,000	5.0	1990	9	255,000	3.5
1976	13	271,000	4.8	1984	6	277,000	2.2	1991	18	254,000	7.1
1977	18	272,000	6.6	1985	10	271,000	3.7	1992	5	258,000	1.9
1978	16	276,000	5.8	1986	10	264,000	3.8	1993	11	260,000	4.2
1979	11	281,000	3.9	1987	14	258,000	5.4	1994	8	261,000	3.1
1980	16	283,000	5.7	1988	11	253,000	4.3	1995	14	266,000	5.3
1981	23	285,000	8.1	1989	10	252,000	4.0				
Total	118	—	—	Total	75	—	—	Total	65	—	—
Mean	16.9	277,714	6.1	Mean	10.7	265,143	4.1	Mean	10.8	259,000	4.2

*Kentucky Department for Health Services, Division of Vital Statistics. †University of Louisville, Urban Studies Institute.

Evidence that Child Restraint Use Reduces the Number of Fatal and Nonfatal Injuries

Tennessee led the nation by passing the first child restraint law in 1978. Other states shortly followed suit, and by 1985, every state and the District of Columbia had passed child restraint legislation.[5] That legislative efforts increase the use of CRDs and that CRD usage is effective in reducing the number of deaths and injuries from MVCs are well documented. For example, between 1978 and 1983, child restraint use in Tennessee rose from 8% to more than 30%, and the number of deaths among children younger than 4 years of age declined by more than 50%.[6] In Michigan, the use of CRDs among children aged 0-4 increased from 12% to 51% and the number of injuries to the head and extremities declined 20% to 25%.[7] National averages indicate that the proper use of CRDs can reduce fatalities by 71% and hospitalizations by 67%.[5]

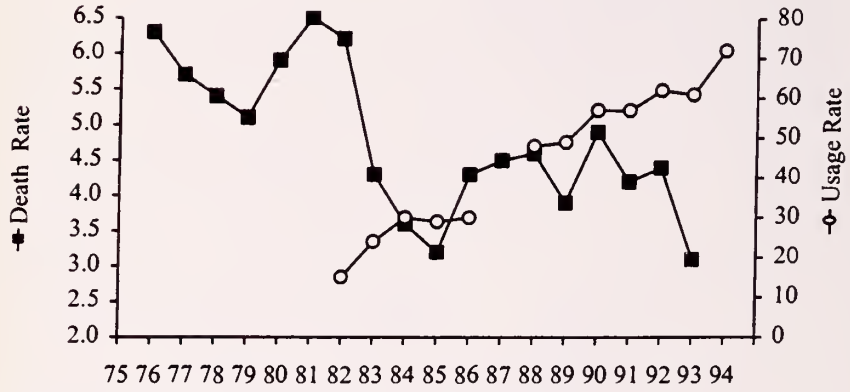

Fig 1 — Motor Vehicle Crash Fatalities vs Restraint Usage Passengers Aged 0-4

Based on Kentucky data from 1990 to 1994, CRD use was associated with substantial reductions in the number and percentage of children aged 3 and younger sustaining MVC-related injuries. Comparisons of children who were restrained (child safety seat or safety belt) with those who were unrestrained revealed a 50% decline in fatalities for children in restraints. Likewise, there was a 70%, 58%, and 42% reduction in the "incapacitating," "non-incapacitating," and "possible" injury categories, respectively.[8]

Table 2. Deaths to MV Occupants Aged 0-4: Observed vs. Expected Deaths, 1982-1994

Year	Observed Deaths	Expected Deaths*	O/E Ratio†
1982	16	17.3	0.92
1983	14	17.1	0.82
1984	6	16.9	0.36
1985	10	16.5	0.61
1986	10	16.1	0.62
1987	14	15.7	0.89
1988	11	15.4	0.71
1989	10	15.4	0.65
1990	9	15.6	0.58
1991	18	15.5	1.16
1992	5	15.7	0.32
1993	11	15.9	0.69
1994	8	15.9	0.50
1982-1994	142	209.0	0.68

*Average death rate for 1975-81 × population aged 0-4.
†Ratio of observed deaths to expected deaths.

MV Occupant Death Rates Before and After Enactment of Kentucky's Child Restraint Law

During the 7-year period (1975-1981) prior to the passage of the child restraint law in Kentucky, 118 children aged 0-4 died as MV occupants.[2] In 1981, the death rate was 8.1 per 100,000 (0-4 year-olds). In 1983, after passage of the law, the MV occupant death rate among children 0-4 years of age was 5.0 per 100,000. By 1984 (the third year the restraint law was in effect), the death rate was as low as 2.2 per 100,000 (Table 1). This represents a 73% reduction in death rate, and an estimated 17 young lives saved. On average, comparison of the 7-year "before" (1975-1981) period with the 7-year "after" (1983-1989) period revealed a 37% and 33% reduction in the average number of deaths and death rate (respectively) among children aged 0-4 as MV occupants (Table 1). Three-year running averages of death rates among children 0-4 years of age are shown in Fig 1 for 1975 through 1994.

In Table 2, the observed deaths for each year following enactment of Kentucky's child restraint law were compared with the expected number of deaths based on the average death rate prior to passage of the restraint law (1975-1981). Based on a chi-square test, the observed number of deaths were significantly fewer than the expected number of deaths ($p < 0.002$). The results indicate significant reductions in the number of deaths to MV occupants aged 0-4 after enactment of the child

restraint law in Kentucky. While we cannot attribute this reduction entirely to the child restraint law, its enactment certainly facilitated awareness of the importance of CRD use and interventions that contributed to the decline in death rate. Across the Commonwealth, a number of public health, public protection, and local hospital efforts were initiated to educate residents about correct CRD use and to increase the availability of CRDs among lower income families. National trends related to increased acceptance and use of CRDs may also have contributed to the decrease. Thus, combined legislative, educational, and promotional efforts resulted in the observed reduction in child MV occupant deaths in Kentucky.

Trends in MV Occupant Death Rates During the Past 20 Years

To examine trends in the MV occupant death rate of 0-4 year-olds over time, the data in Table 1 have been put into graphic format (Fig 1). Dramatic fluctuations in death rate (*filled boxes*) are apparent, and a number of influential factors could contribute to these changes. For example, what might account for the decrease in MV occupant death rate that occurred between 1975 and 1979? Given Tennessee's geographic proximity to Kentucky, the publicity surrounding Tennessee's law in 1978 may have launched an increase in safety seat use in Kentucky, leading to a subsequent decline in MV occupant death rate among 0-4 year-olds. The decline in MV occupant death rate among young children aged 0-4 was transient; between 1979 and 1981 there was an equally dramatic increase in death rate. Unfortunately, data on the use of child restraints prior to 1982 are not available, and without information on use rates, it is difficult to determine what may have been responsible for the rise in death rate (but see below). However, as predicted, the death rate for MV occupants aged 0-4 declined precipitously after amendment of the Kentucky statute in 1982.

Child Restraint Usage Rates in Kentucky

An observational survey conducted prior to enactment of the law (May and June 1982) reported a statewide child safety seat usage rate (Fig 1, *open circles*) of 14.4%.[9] An identical survey performed after the law became effective (May through August 1983) reported a usage rate of 22.7%.[10] Although usage rates leveled off between 1984 and 1986, a steady increase has been reported since 1988. (An observational survey was not performed in 1987). In 1994, a statewide child restraint usage rate of 72% was reported. The usage rate among children less than 1 year of age was 83%; for children aged 1 to 3, the usage rate was 68%.[11] If usage rates continue to increase, the state will meet the *Healthy Kentuckians 2000* objective to increase the use of child restraint systems among children aged 0-4 to at least 75%.[12] Nationally, child restraint use in 1994 was estimated at about 88% for children under 1 year of age, and 61% for children 1-4 years of age.[13]

Possible Factors that Influence Childhood MVC-Related Fatality Rates

That the use of restraint systems is effective in reducing the number of deaths and injuries from MVCs is well documented. It is also apparent that legislative efforts increase restraint usage.[5-8] Nevertheless, additional factors can affect usage rates, and events that occurred subsequent to enactment of the child restraint law may have impacted MV occupant death rates among children aged 0-4 in Kentucky. For example, in 1988 the state introduced a penalty ($50 fine) for violation of the restraint law.[11] To the extent that this sanction was enforced, the penalty may have contributed to the observed increase in usage. While information on the number of citations for such violations was not available, there was a small decline in MV occupant death rate between 1988 and 1989 (Fig 1).

In 1990, Lexington enacted a local ordinance mandating the use of seat belts for adults; the city of Louisville passed a similar ordinance in 1991. By 1994, all city and county ordinances were replaced by a statewide safety belt law.[11] During this time, there was a steady increase in safety seat usage for children under 4 years of age from 57% in 1990, to 72% in 1994.[11] The societal impact of these legislative actions on related safety issues should not be underestimated. For example, adult and child occupant restraint use is higher in states with a mandatory safety belt law than it is in states without such a law.[14]

We wanted to examine the relationship between statewide highway safety campaigns and childhood MV occupant death rate during this 20-year period. However, the information we received was sparse, and was obtained from a verbal history (Kentucky State Police, personal communication) rather than from official records. Other historically relevant events (eg, bus crashes, multiple-vehicle/fatality crashes) may affect the

number of fatalities (eg, 18 children killed in 1991; Table 2) and hence, MV occupant death rate during any given year.

Limitations

It is important to keep in mind that the relationships we have discussed in terms of the child restraint law and death rates among MV occupants aged 0-4 are strictly correlational, as are the relationships between death rates and CRD use rates. For example, for the data used to derive MV occupant death rates, restraint status information is not available. Similarly, it is not feasible to obtain information on subsequent MVC involvement and/or injury outcomes from the observational studies conducted to procure information on restraint status. As discussed above, many factors potentially impact both the occurrence of MV occupant injuries and CRD use. To develop appropriate injury prevention strategies, all factors must be considered and interpreted based on their historical and sociopolitical context.

Conclusion

The data provided in this 20-year review suggest that passage of the child restraint law in Kentucky contributed, at least in part, to reductions in the death rate among children aged 0-4 as MV occupants. However, despite improvements in CRD usage and MV occupant death rates, MVC involvement continues to be a leading cause of death and disability among children in Kentucky and across the United States. A large number of children remain unrestrained, or improperly restrained, as MV occupants. It is imperative that efforts to promote CRD use continue unabated. CRDs must become more readily available and affordable, and purchasers must be educated in the proper installation of the CRD, as well as proper placement of the child in the CRD. By promoting *universal* and *proper* use of CRDs, unnecessary deaths and injuries to children as MV occupants can be significantly reduced.

References

1. Traffic Safety Facts, 1995 — *Occupant Protection.* Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration, 1996.
2. Traffic Safety Facts, 1995 — *Children.* Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration, 1996.
3. Kentucky Revised Statute, Chapter 189, Section 125 (KRS 198.125). Frankfort, KY: Legislative Research Commission.
4. Spurlock CW. Motor vehicle passenger deaths among Kentucky children age 0-4. *Kentucky Epidemiologic Notes and Reports.* 1985;20:3-4.
5. Kahane CJ. An evaluation of child passenger safety: The effectiveness and benefits of safety seats. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration, 1986; Report No. DOT-HS-806-890.
6. Decker MD, Dewey MJ, Hutcheson RH, Schaffner W. The use and efficacy of child restraint devices. *JAMA.* 1984;252:2571-2575.
7. Margolis LH, Wagenaar AC, Liu W. The effects of a mandatory child restraint law on injuries requiring hospitalization. *Am J Dis Child.* 1988;142:1099-1103.
8. Agent KR, Pigman JG. Analysis of traffic accident data in Kentucky (1990-1994). Kentucky Transportation Center, 1995; Research Report No. KTC-95-19.
9. Agent KR, Crabtree JD. Child restraint usage in Kentucky (pre-legislation). Lexington, KY: Kentucky Transportation Research Program, 1982; Research Report No. UKTRP-82-15.
10. Agent KR. Child safety seat usage in Kentucky after enactment of a mandatory usage law. Lexington, KY: Kentucky Transportation Research Program, 1983; Research Report No. UKTRP-83-18.
11. Agent KR. 1994 safety belt usage survey and evaluation of effectiveness in Kentucky. Lexington, KY: Kentucky Transportation Center, 1994; Research Report No. KTC-94-19.
12. Kentucky Department for Health Services. *Healthy Kentuckians 2000.* Frankfort, KY: Cabinet for Human Resources, Department for Health Services, 1991.
13. National Center for Statistics and Analysis. National Occupant Protection Use Survey: Controlled Intersection Study. Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration. Research Note, May 1995.
14. Russell J, Kresnow M-J, Brackbill R. The effect of adult belt laws and other factors on restraint use for children under age 11. *Accid Anal Prev.* 1994;26:287-295.

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Chronic Cavitary Pulmonary Sporotrichosis: Efficacy of Oral Itraconazole

Jesus Ramirez, MD; Ryland P. Byrd, Jr, MD; Thomas M. Roy, MD

The small number of patients suffering from pulmonary involvement with Sporothrix schenckii *has prevented prospective controlled studies that could determine the optimal therapy for this chronic infection. The clinician's ability to determine the best medical treatment for chronic cavitary pulmonary sporotrichosis is also tempered by the limited use of newer azole antifungal agents in this disorder as well as the relative lack of efficacy reported with older therapies. We present a 50-year-old male with primary pulmonary sporotrichosis whose chronic cavitary disease responded to oral itraconazole.*

Sporothrix schenckii is a dimorphic saprophytic fungus with a worldwide distribution. It can be isolated from soil, plants, moss, and thorny bushes. Pulmonary infection with *Sporothrix schenckii* is rare and occurs by direct inhalation or aspiration of conidia. Involvement of the respiratory system from disseminated lymphocutaneous infection accounts for only 10% of pulmonary disease caused by sporotrichosis.[1] Despite the chronic nature of the pulmonary lesion, treatment is indicated due to the possibility of death and the probability of ongoing lung destruction.

Because the medical management of chronic cavitary sporotrichosis with traditional antifungal agents has been unsatisfactory,[1,2] surgical resection is generally considered the most effective treatment. However, fully one half of patients with pulmonary sporotrichosis have some impairment of host defenses and surgery is not always a realistic option. The introduction of newer antifungal agents, the imidazoles, has offered a unique opportunity to employ daily oral therapy. An earlier case report recounted that itraconazole successfully cured a patient with pulmonary sporotrichosis.[3] We report a second patient with chronic cavitary sporotrichosis who was treated with oral itraconazole and achieved clinical and radiographic cure.

Case Report

A 50-year-old male was referred for evaluation of weight loss, hemoptysis, and a left upper lobe cavity. The left upper lobe cavity had first been noted 3 years previously. No diagnosis had been made despite three bronchoscopic investigations. PPD had been negative on several occasions. He did poorly and suffered a 30 pound weight loss despite intermittent long term treatment with various antibiotics. His hemoptysis began 3 months prior to our evaluation and had progressed to expectoration of approximately 20-40cc of bright red blood per day. He denied nausea, vomiting, diarrhea, shortness of breath, fevers, chills, or night sweats during his illness. He denied having a rash or enlarged and tender lymph nodes. He admitted to no risk factors for human immunodeficiency virus infection (HIV).

His past history was significant for a partial gastrectomy for peptic ulcer disease and chronic obstructive pulmonary disease (COPD) from tobacco use. He had worked for 12 years as a landscaper until he became disabled due to chronic fatigue. He did not use alcohol.

The patient was afebrile and his vital signs were normal. The patient was thin. There was decreased fremitus and increased resonance anteriorly in the left upper lung field. Crackles were present in this area. There was a well healed midline abdominal surgical scar. The remainder of his physical exam with particular attention to the skin and lymph nodes was normal.

The patient had a mild normocytic, normochromic anemia with a hemoglobin and hematocrit of 11.0 g/dl and 33%, respectively. His white blood cell count and differential were normal. His serum biochemical survey and electrolytes were normal. His sedimentation rate was elevated at 79 mm/hr. HIV titer was negative. A PPD was nonreactive. PA and lateral chest radiographs docu-

From the Department of Internal Medicine, Pulmonary Medicine, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN; and the Veterans Affairs Medicol Center, Mountoin Home, TN.

Correspondence to Ryland P. Byrd, Jr, MD, Veterans Affairs Medicol Center 111-B, Divisian af Pulmonory Medicine, PO Box 4000, Mauntain Hame, TN 37864-4000. Phane 423/926-1171; Fax #423/461-7939.

Fig 1 — PA chest radiograph documenting a large thick walled cavity in the left upper lobe.

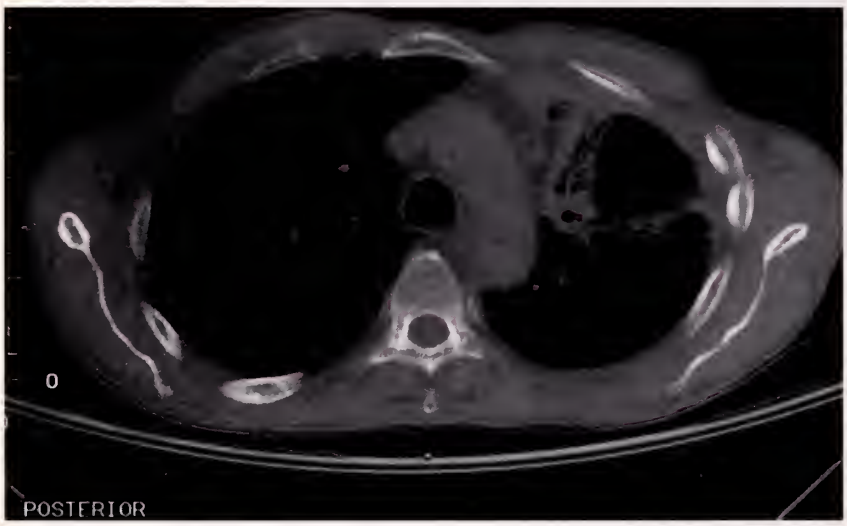

Fig 2 — CT scan of the chest demonstrating a left upper lobe cavity surrounded by an infiltrate.

mented a large thick walled cavity in the left upper lobe (Fig 1). Computerized tomography confirmed the chest roentgenogram findings (Fig 2).

Sporotrichum titer by complement fixation was positive at 1:80 in our infectious disease laboratory and subsequently by our regional reference laboratory. All other fungal serology was negative. The patient refused bronchoscopy and surgery. *Sporothrix schenkii* was cultured from induced sputum.

The patient showed gradual and progressive improvement when oral itraconazole was started at 400 mg/day in divided doses. He gained 20 pounds of weight, his level of energy improved, and his hemoptysis resolved. His hemoglobin increased to 14.1 mg/dl and his sedimentation rate returned to normal. After 1 year of itraconazole, the left upper lobe cavity regressed in size and became thin walled. His sporotrichosis titers returned to normal over 9 months. He completed 12 months of daily therapy without side effects. He has not shown any evidence of relapse in the 12 month period following discontinuation of itraconazole.

Discussion

Primary pulmonary sporotrichosis and pulmonary involvement with systemic infection are rare occurrences with less than 150 reported patients.[3] Almost all of these individuals lived in the United States. Approximately 73% of the patients diagnosed with pulmonary sporotrichosis have resided in the states bordering the Mississippi and Missouri rivers.[1] Patients rarely present before age 30 or after age 60 and the average age of patients with pulmonary sporotrichosis is 46 years. The 6 to 1 male predominance in this disease may reflect a gender bias towards activities or environments where the fungus is aerosolized.[1] Over one half of these patients have some impairment of host defenses such as diabetes mellitus, COPD, and alcoholism.[1-6] Although cutaneous and disseminated sporotrichosis have occurred in patients with the acquired immunodeficiency syndrome (AIDS),[7] pulmonary infection has been rare in this population.[8]

The roentgenographic findings of pulmonary sporotrichosis may include interstitial and nodular infiltrates, consolidation, and tracheobronchial lymphadenopathy,[1-3,6,9] but two thirds of the patients present with an upper lobe cavity that is confined to one lung. These cavities are generally irregular, thin walled and surrounded by an infiltrate.[9] Fluid within the cavity is extremely rare as are pleural effusions.[9] There is a single report of empyema due to sporotrichosis.[10]

Chronic cavitary pulmonary sporotrichosis has not responded well to traditional medical therapy. While SSKI is effective in cutaneous disease and may be effective in non-cavitary pulmonary infection, it is not effective in the treatment of cavitary

pulmonary sporotrichosis having a success rate of only 1 patient out of 14.[1,2] The cure rate of pulmonary sporotrichosis with intravenous amphotericin B ranges from 35% to 50%.[1,2,11] Moreover, *Sporothrix schenckii* organisms have been identified that are resistant to amphotericin B.[5,12]

The newer azole antifungal agents have also failed to successfully treat pulmonary sporotrichosis.[1,3,5] These antifungal agents exhibit fungistatic activity through the inhibition of ergosterol biosynthesis, which is a vital component of fungal cell membranes. Ketoconazole (an imidazole) was the first to become available in the United States but has been found to be the less effective on altering the sterol content of four strains of the fungus *Cryptococcus neoformans* than the triazole, itraconazole.[13] Similar studies have not to our knowledge been preformed on *S schenckii*. Fluconazole has been tried without success in three patients with pulmonary sporotrichosis.[14]

Itraconazole is possibly more effective due to its high lipophilicity and efficient fungal penetration.[13] Cutaneous, lymphangitic, osteoarticular, and non-pulmonary disseminated infections with *S schenckii* have all been effectively treated with itraconazole.[6,15-18] A cure was achieved in one previous patient with chronic cavitary pulmonary sporotrichosis.[3] In another study, three patients with pulmonary sporotrichosis were treated with itraconazole.[4] One patient completely responded to therapy, another relapsed after his initial 18 month course of itraconazole at 400 mg per day, and the third patient failed to respond at all. Unfortunately, the characteristics of the infection and its radiographic findings were not documented in this report and we cannot be sure that a patient with chronic cavitary sporotrichosis was treated.

Based on our patient and the limited data available, oral itraconazole appears to be at least as effective in the treatment of chronic cavitary pulmonary sporotrichosis as intravenous amphotericin B. Importantly, itraconazole has the advantages of an oral route of administration and safer toxicity profile.[15] Individuals with local cavitary pulmonary sporotrichosis who are good surgical candidates should undergo complete surgical resection. The combination of complete surgical resection and amphotericin B has achieved the most favorable results with cure rates of 70% to 80%.[1,2,17]

Resection, however, is not always feasible, especially in patients with COPD and compromised lung function. Oral itraconazole therapy should be considered in this circumstance. Patients who are not surgical candidates might benefit from daily oral itraconazole for 1 to 2 years. Until the efficacy of itraconazole can be tested on additional patients, intravenous amphotericin B should remain the initial therapy for the patient who is seriously ill.[15] In the patient with a more insidious pulmonary disease, itraconazole offers the clinician an alternative to intravenous amphotericin B. The exact dosage and duration of treatment for chronic cavitary sporotrichosis remain to be elucidated.

References

1. Pluss JL, Opal SM. Pulmonary sporotrichosis: review of treatment and outcome. *Medicine.* 1986;65:143-153.
2. Gerding DN. Treatment of pulmonary sporotrichosis. *Semin Respir Infect.* 1986;1:61- 65.
3. Breeling JL, Weinstein L. Pulmonary sporotrichosis treated with itraconazole. *Chest.* 1993;103:313-314.
4. Sharkey-Mathis PK, Kauffman CA, Graybill JR, et al. Treatment of sporotrichosis with itraconazole. *Am J Med.* 1993;95:279-285.
5. Dall L, Salzman. Treatment of pulmonary sporotrichosis with ketoconazole. *Rev Infect Dis.* 1987;9:795-798.
6. Winn RE, Anderson J, Piper J, et al. Systemic sporotrichosis treated with itraconazole. *Clin Infect Dis.* 1993;17:210-217.
7. Bolao F, Podzamczer D, Ventin M, et al. Efficacy of acute phase and maintenance therapy with itraconazole in an AIDS patient with sporotrichosis. *Eur J Clin Microbiol Infect Dis.* 1994;13:609-612.
8. Heller HM, Fuhrer J. Desseminated sporotrichosis in patients with AIDS: case report and review of the literature. *AIDS.* 1991;5:1243-1246.
9. Rohatgi PK. Pulmonary sporotrichosis. *S Med J.* 1980;73:1611-1617.
10. Fields CL, Ossorio MA, Roy TM. Empyema associated with pulmonary sporotrichosis. *S Med J.* 1989;82:910-913.
11. Parker JD, Sarosi GA, Tosh FE. Treatment of extracutaneous sporotrichosis. *Arch Intern Med.* 1970;125:858-863.
12. Baker JH, Goodpasture HC, Kuhns HR, et al. Fungemia caused by an amphoteracin B-resistant isolate of *Sporothrix schenckii. Arch Pathol Lab Med.* 1989;113:1279-1281.
13. Franzot SP, Hamdan JS. Effects of three azole derivatives on the lipids of different strains of *Cryptococcus neoformans. Mycoses.* 1995;38:183-189.
14.Kauffman CA, Pappas PG, McKinsey DS, et al. Treatment of lymphocutaneous and visceral sporotrichosis with fluconazole. *Clin Infect Dis.* 1996;22:46-50.
15. Kauffman CA. Old and new therapies for sporotrichosis. *Clin Infect Dis.* 1995;21:981- 985.
16. Restrepo A, Robledo J, Gomez I, et al. Itraconazole therapy in lymphangitic and cutaneous sporotrichosis. *Arch Dermatol.* 1986;122:413-417.
17. Lavalle P, Suchil P, De Ovando F, et al. Itraconazole for deep mycoses: preliminary experience in Mexico. *Rev Infect Dis.* 1987;9:s64-s70.
18. Borelli DL. A clinical trial of itraconazole in the treatment of deep mycoses and leishmaniasis. *Rev Infect Dis.* 1987;9:s57-s63.

Financial Planning Considerations at Retirement

By Robert J. Cole, Jr, CLU, ChFC, CFP

The process of retirement planning is a difficult one for a physician. The Planning process should address the areas of Investment Planning, Estate Planning, and Risk Management. This article examines each of these dimensions with special emphasis on Modern Portfolio Theory as the basis for investment planning.

Popular Myths

There are several popular myths that many people mistake as accurate. Like all myths, these contain some portion of truth but simplify what is a typically complex issue. A good example of this is "An apple a day keeps the doctor away"; or another one is "If I ignore the pain, it will go away"; and finally, my favorite one is "I can do my own financial planning." The purpose of this article is to address some of the truths that are necessary in order to understand the financial planning steps that need to be taken as one approaches retirement.

The Planning Process

The first step in the process is to estimate your retirement income needs. In order to accomplish this there are four assumptions that have to be made. First, you need to estimate your current standard of living or said another way, how much money do you spend each month now and what adjustments do you feel will be made after you retire? Second, what rate of return will you earn on your investment assets? Third, what is the inflation assumption? And, finally, what is the life expectancy of the parties involved? It is critically important that you give sound thought to these four assumptions. There are many popular software programs that will make retirement calculations, but, without an accurate accounting of each of these assumptions, the output of these programs is fairly meaningless.

Certainly one of the most important components of this process is a full scale review of your investment plan. This involves taking a strict inventory of your current *working assets*. By working assets we mean assets that can produce revenue for you to live on during your lifetime. Typical sources of these assets are retirement plans and individual investments.

Risk Assessment

Once this accounting is completed, it is necessary for you to assess your risk tolerance. This is a fairly complicated procedure and myths abound in this area. Risk is an interesting concept. Most people feel that risk means losing your principal. However, it is clear with today's long lifestyles that the real risk is not *losing* your principal but *outliving* your principal. Many people use antiquated guidelines for developing the risk level in their portfolio based on past experience, which in many cases no longer applies in today's environment. There are several risk assessment tools available today. Table 1 shows a simple approach. By totaling your preferences you can decide how to allocate your assets among the three basic asset classes, Money Market, Fixed Income, and Equities.

One of the most accepted approaches to risk management is called Modern Portfolio Theory. This is the philosophy set forth by Harry Markowitz in the late 50s. Under this approach, a person assesses their risk tolerance (as measured by the standard deviation) for various asset classes, then combines these classes in a mathematically constructed model designed to maximize the return while minimizing the fluctuation. Fig 1 shows the risk and return history of several basic asset classes over the last 20 years. As you can see, there is a direct relationship between the amount of risk involved and the rate of return that you earn. The question is how much to put in each asset class? This is where portfolio optimization can assist you.

Table 1. The Portfolio Allocation Scoring System (PASS)

Investment Objective	Most	Very	Some	Little	None	Total Score	Money market/Fixed income/Equities
1. High long-term total return	5	4	3	2	1	35	5/5/90
2. Long-term capital gains potential	5	4	3	2	1	29-34	10/10/80
3. Tax advantages	5	4	3	2	1	23-28	20/20/60
4. High current income	1	2	3	4	5	17-22	30/30/40
5. Low total return fluctuation	1	2	3	4	5	11-16	40/40/20
6. Low single-period loss probability	1	2	3	4	5	7-10	50/40/10
7. High degree of liquidity	1	2	3	4	5		

Portfolio Optimization

The concept of portfolio optimization uses computer prototypes to develop a model that is most likely to produce the rate of return for the stated risk level that you are willing to take. The beauty of this particular approach is its simplicity. Once the proper percentages have been established, the model produces several statistical guidelines for the selection of the underlying investments. The common way to implement this approach is to use mutual funds. By carefully selecting the mutual funds that meet the statistical criteria developed for each asset class in the model, you can increase the probability that you will meet your target rate of return. Another advantage under this approach is that one can ignore the requirements that individual stocks impose on an investment program, namely timing. You let the mutual fund manager make those decisions and simply track his or her performance. The typical holding period for this asset allocation model is 5 years.

Annual Reallocation

Once these steps are completed, it is only necessary once a year to take a look at your current portfolio and see how the percentages of the portfolio compare to your target percentages. If a certain sector of the portfolio has grown by more than 5% it is imperative to sell assets in that class and redistribute the funds amongst the other asset classes until you return to your original asset allocation model. This process preserves the risk level set in the prototype. We prefer the use of no-load funds since they minimize the transaction costs involved in annual reallocation. You should also evaluate each fund's relative performance and investment style to assure that you still have the best possible choice.

Pension Assets

Another critical decision that faces the physician at retirement is how to take distributions from his retirement plans. This is a very complicated field and yet many people approach the decision process rather casually. When you consider the fact that this is normally the largest single asset in

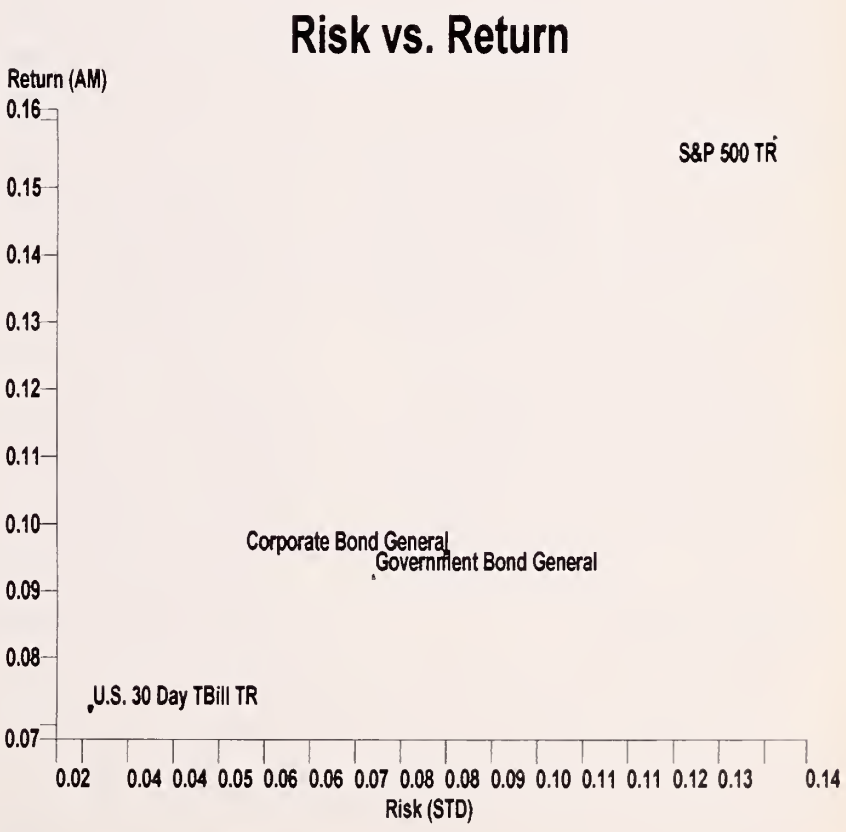

Fig 1

your estate, it would make sense that there should be some planning done *before* the distribution is required. Taxes, both income and estate, play a major role in this decision process.

The first decision is whether to take a direct rollover to an IRA or to take a lump-sum distribution and take advantage of special averaging rules. IRAs are taxed differently than qualified retirement plans, and as such, careful consideration should be given not only to the needs of the retiree but also to the needs of the beneficiaries *before* a particular approach is selected. Minimum distributions (which are required around the age of 70½) add a third dimension to this confusing process. There are three methods for calculating minimum distributions and each of them have considerable financial planning consequences, both in the income tax area and in the investment area. The selection of the proper one requires a review of *all* the planning objectives, not just the investment goals.

Risk Management Considerations

It is normally at retirement that one makes several final decisions concerning their insurance coverages. This involves both medical insurance and life insurance. A careful review of one's estate objectives should give an indication as to how these insurance coverages fit into one's overall plan. It may be time to consider a life insurance trust. Finally, one should review their current wills and trusts to see if any changes are necessary in light of the movement into the retirement phase.

If you retire before eligibility for Medicare and are currently covered under a group plan, COBRA may offer an opportunity to meet your medical insurance needs. Once you become eligible for Medicare, a good Medicare supplement policy is advisable. Typically long-term care coverage (nursing home insurance) is an issue if your estate is less than $4 million. Because of the many different options that are available under these plans, it is necessary to take a studied look before making a decision.

Summary

Retirement can be an emotionally difficult transition. Because one makes choices during this period of time that could affect the balance of his or her lifetime, it is important that one carefully consider each of the components of their financial picture in order to make the best possible decision. Because of the magnitude of the retirement decisions, it is imperative that each of these decisions is integrated so that an overall plan can be developed and used as a guideline for the balance of one's life. After all this is completed, one should be able to look forward to a fruitful and enjoyable retirement period that he or she has worked so hard to accomplish.

The above article has been summarized from a presentation given by Mr Cole at the Kentucky Medical Association Seminar "Gearing Up for Retirement," presented in April of 1997. Mr Cole is president of Financial Architects, Inc, a fee-based financial planning firm.

Telemedicine

"Our professors and predecessors showed us how laying on of the hand, touching and listening, were paramount talents, and that clinical judgement came with experiencing the intimate doctor-patient relationship. How do we equate this style of medicine with the next generation of electronic wizardry?"

Telemedicine is here, the tools for its implementation are evolving, and now we must consider the side effects. Have a telephone, even with basic service, and the information will start to flow with ease. Better with a modem, connect to the Internet or directly to the source, and let the downloading begin. Face the television, monitor to the computer literate, and the visual conduction comes through with colorful impact. Add the microphone, some fair speakers, and the only thing missing is the initial palpable handshake, since the mere connection in computer lingo is an electronic handshake.

Now comes the rub. What are the rules, who makes them, and who can enter the playing field? My latest Kentucky Licensure Board minutes detail some work already, with committee and personnel being appointed and charged with deciding the qualifications. Determining credentials can be burdensome for those sitting in judgement of those who want to practice telemedicine, since little information is available about exactly what and where this will take place. These frontiersmen in medicine can be pioneers, pathfinders who invent and construct the road that others will follow. Some may not be wholly benevolent, seeing financial and entrepreneurial possibilities, instead of purely making progress. Our professors and predecessors showed us how laying on of the hand, touching and listening, were paramount talents, and that clinical judgement came with experiencing the intimate doctor-patient relationship. How do we equate this style of medicine with the next generation of electronic wizardry?

Is it for the patient's welfare? This basic question, along with "Do no harm!" should be a guide. Those of us asked to evaluate whether a new service, or some practitioner using these tools, should be accepted, have to bear in mind those questions and demands. As telemedicine impacts our practices and patients experience what has taken place, we should carefully document these results and forward this information to the proper authorities. The appropriate state and national boards, traditionally watching what their members do and desire, would also be good references.

Progress should be encouraged, but considered for what it brings and leaves behind. Our medicine will never be the same, and we do not want it to be. We do want our medicine to be better, and that should be the goal of telemedicine as well.

Stephen Z. Smith, MD

Aroona Dave

Kentucky Medical Association Alliance

This year our 75th Annual Convention is very special because members of the Hopkins County Medical Alliance are working diligently to make it very enjoyable and memorable for all of you.

This is our 75th Annual Convention. We will be installing our 74th President, Jan Crase (Mrs James) and entering the 76th year. You say, "Hey, these numbers don't match!" Well, I agree, but our first President, Mrs Graham Laurence, and second President, Mrs Van Albert Stiley (May) served two years each in a row.

They served the Alliance in dignity, integrity, and great pride. I applaud them and all those Presidents who came before me.

Annual Convention is the time when we reward ourselves for all the accomplishments of the year. It is a forum to address Amendments to our Bylaws/Policies that will help our future leaders implement them and run the organizational affairs smoothly.

It is the time to take a stand on current health issue legislation by adopting resolutions. It is the time for networking with others across the state, a time to rekindle old friendships, and for rejoicing our 75 years of Excellence.

We are the Proactive Volunteer Voice of Kentucky Medical Association. It also happens during this month when doctors across the states and nation are being honored. Their excellence in health care delivery to children and to the families is being celebrated in many ways on March 30, 1998. March is also Medical Alliance Month, during which we reflect upon all our Projects/Programs.

So, I personally welcome you to the Celebration of 75 Years of Kentucky Medical Association, Alliance's Annual Convention:

April 20-22, 1998
(Monday-Wednesday)
at Day's Inn
1900 Lantaff Boulevard
Madisonville, KY 42431
Telephone: 502-821-8620
Fax: 502-825-9282
(Day's Inn is located at Exit 44, Pennyrile Parkway)

Advance Reservations are required and highly recommended for ALL MEMBERS!

For complete reservation for the Hotel and Convention Registration, please look for *Blue Grass News* coming to you soon.

Please come and join us.

Fondly,

Aroona

Aroona Dave
KMAA President

DAY'S INN — MADISONVILLE

Sunday, April 19

6:00-9:00 PM Hospitality Suite

Monday, April 20 (Day's Inn)

7:30 AM-5:00 PM Hospitality
8:00 AM-4:00 PM Registration
9:00 AM-12:00 NOON Basket Silent Auction
9:00 AM-12:00 NOON Committee Meetings
12:00 NOON-1:00 PM LUNCHEON & HOSPITALITY
2:00-3:00 PM TRANSITION FOR OFFICERS/CHAIRMEN
3:00-4:00 PM Pre-Convention Board Meeting
5:30 PM RECEPTION & DINNER (to honor 1997-98 Board of Directors & County Presidents-Elect)
At the home of Dr & Mrs James Donley,
520 Logo Drive, Madisonville, KY 42431

AT HEALTH TECHNOLOGY CENTER — MADISONVILLE

7:30 AM-9:00 PM MEDIA VIOLENCE
(CME/Staff Development Credit Available)
Dr David Walsh*
Delegates & Guests
Area Health Coordinators

Tuesday, April 21 (Day's Inn)

Basket Silent Auction continues
7:00 AM Hospitality
7:00-8:00 AM Registration
8:00-11:30 AM House of Delegates
11:30-1:00 PM Past Presidents Luncheon
Special Presentations
75th Anniversary
1:00-4:00 PM Tour of Adsmore, Princeton, KY
6:00 PM Reception at **The Loft** for
President-Elect, Jan Crase (James)
and 1998-1999 Board
6:30 PM Dinner, Installation of Officers, Entertainment,
celebration of 75th Birthday
9:00-10:30 PM Hospitality

Wednesday, April 22 (Day's Inn)

8:30 AM Continental Breakfast
Post Convention Board Meeting

**Dr Walsh is the president and founder of the National Institute on Media and the Family. In keynote speeches throughout the United States, as author of* Selling Out America's Children *(Fairview Press, 1994) and the American Medical Association's* Physician Guide to Media Violence *(AMA, 1996), and as the leader of hundreds of community discussions, Dr Walsh has gathered together the forces of many diverse organizations and spawned a vigorous national dialogue on the issue of violence in the media.*

1997-98 New Officers' Profiles

During the 1997 KMA Annual House of Delegates meeting held in Louisville, three new officers were elected to serve on the Board of Trustees. KMA congratulates these members on their election and thanks them for their valuable leadership.

Robert C. Hughes, MD
First District Trustee

A board certified family physician practicing in Murray, Dr Hughes was elected to serve a 3-year term as First District Trustee.

Dr Hughes began his long association with KMA while in medical school by serving on KMA's Emergency Medicine Committee and the Committee to Investigate Changing Trends in Medicine. During that time, he also helped organize the original Resident's Physician Section of KMA. An active KMA member since 1983, Dr Hughes served several terms as a KMA Delegate and as an Alternate First District Trustee in 1996-97. Current obligations include the KEMPAC Board, Medicaid Managed Care and State Legislative Activities Committees. Professional affiliations include American Academy of Family Physicians and the Southern Medical Association. He has been a member of the Calloway County Board of Health since 1984, Chairman of the Department of Medicine at Murray-Calloway County Hospital since 1993, and has served as a volunteer Assistant Clinical Professor at both the University of Louisville and University of Kentucky medical schools since 1989.

A native of Martin, Kentucky, Dr Hughes, 42, completed his bachelor's degree at Transylvania University in 1977 and earned his MD from U of L in 1981. Following an internship in the Department of Obstetrics and Gynecology at U of L, he completed a residency in Family Practice in 1984.

Dr Hughes is married to Joyce Marie Hughes, MD, a pediatrician, and they are the parents of four sons. His personal interests and hobbies include hunting, politics, and reading.

John M. Patterson, MD
Seventh District Trustee

A board certified urologist in private practice in Frankfort, Dr Patterson was elected to serve a 3-year term as Seventh District Trustee.

An active member of KMA since 1987, he has served continuously as a KMA Delegate from Franklin County since 1992 and served as an Alternate Delegate in 1995-97. Dr Patterson's current service includes membership on the Cancer Committee and KMA Membership Task Force Committee. He is a past president of the Franklin County Medical Society, diplomate of the National Board of Medical Examiners, Federal Aviation Medical Examiner, and a fellow of the American College of Surgeons. Dr Patterson has authored several clinical publications. In addition to his many contributions to organized medicine, he also finds time to be involved in several community and civic organizations.

Dr Patterson, 40, earned his undergraduate degree in 1979 and medical degree in 1983 from the University of Kentucky College of Medicine. He continued his medical education at the University of Kentucky by completing a surgery internship in 1984 and a urology residency in 1988.

He is married to Ann Irvine Pollock, MD, an internist. They have one daughter and two sons, and make their home in Frankfort. Dr Patterson's hobbies include restoring and flying airplanes.

Andrew R. Pulito, MD
Tenth District Trustee

A board-certified Lexington surgeon, Dr Pulito was elected to serve a 3-year term as Tenth District Trustee.

An involved member of KMA since 1979, Dr Pulito served as a KMA Delegate from 1988 to 1994 and as an Alternate 10th District Trustee in 1995-97. He has served on numerous KMA committees in the past, and current obligations include service on the KEMPAC Board of Directors, Membership Task Force Committee, and the State Legislative Activities Committee. Dr Pulito, a past president of the Fayette County Medical Society, is extensively involved in several professional and civic organizations including the Surgical Section and Bioethics Section of the American Academy of Pediatrics, fellowship in the American College of Surgeons, and as a member of the Education Committee of the American Pediatric Surgical Association. He is a Professor of Surgery and Chief, Division of Pediatric Surgery, and Vice-Chairman of the Department of Surgery at the University of Kentucky College of Medicine.

A native of New York City, Dr Pulito, 54, earned his undergraduate degree at Holy Cross College in 1965 and MD from Columbia University in 1969. He completed an internship in 1970 and a residency in surgery in 1974 at the University of Virginia Hospital. Dr Pulito subsequently completed a residency in pediatric surgery at Babies Hospital, Columbia-Presbyterian Medical Center in 1976.

Residents of Lexington, Dr Pulito and his wife, Evelyn, are the parents of a son and daughter.

Highlights of AMA House of Delegates 1997 Interim Meeting

Previously, each member of the Kentucky Delegation to the American Medical Association presented a written report on a single reference committee in each month succeeding the meeting of the AMA House of Delegates. To make the material considered by the House more timely, this report is being given which provides highlights of all reference committee actions. This information is submitted through the resources of the Kentucky Delegation.

— Donald C. Barton, MD
Senior AMA Delegate

Reference Committee on Constitution and Bylaws

- The House of Delegates accepted a Council on Ethical and Judicial Affairs (CEJA) recommendation that physicians not sell non-health related goods from their offices or other treatment settings, with minor exceptions relating to sale of low costs products as part of community fund raising efforts.
- The House also accepted CEJA recommendations on financial incentives in the practice of medicine that reaffirm the physician's primary obligation to the individual patient and that this obligation must override reimbursement considerations. Physicians, individually or through representatives, should evaluate financial incentives prior to entering into any contracts to ensure that quality is not compromised. Patients must be informed by health plans of financial incentives that could affect their level of care and physicians must be prepared to discuss any financial arrangements with their patients that could affect care.
- The House adopted policy that patenting naturally-occurring substances is not unethical per se and made four recommendations in this area.

Reference Committee D

- In reviewing a Council on Scientific Affairs Report on medical use of marijuana, the House adopted a strong statement on the sanctity of physician-patient communication. The report was amended to call for the "free and unfettered exchange of information on treatment alternatives" (not restricted to issues of medicinal marijuana). The House also spoke overwhelmingly in support of the scientific study of potential medical uses of marijuana, calling for the NIH to facilitate controlled, clinical studies on its potential use for AIDS wasting syndrome, cancer cachexia, nausea due to chemotherapy, spasticity and neuropathic pain. This action rejected calls for blanket protection of the medicinal use of marijuana.
- The House restated AMA opposition to any civil immunity for the tobacco industry. This policy, from June 1997, is based on overriding concern for the health of the public, an essential part of the AMA's core purpose.
- The House acted favorably on several other public health issues, adopting actions that: support National Alcohol Screening Day and encourage physician participation; support improved access to chemical dependency treatment programs; will inform physicians about possible abuse of dextromethorpan; will seek limits on smoking near the entrances to public buildings; and will inform physicians of potential misuse of benzodiazepines, particularly as used in sexual assault cases.
- The House emphasized that public health efforts must be grounded in

science, adopting a report of the Council on Scientific Affairs on helmet use by skiers recommending that the AMA not support mandatory helmet use given the lack of evidence on their value and cost effectiveness. Similarly, the House called for study of the effectiveness of protective gear for skateboarders and in-line skaters prior to any mandate for its use.

Reference Committee F

- The House adopted detailed recommendations of a comprehensive Board of Trustees report on AMA corporate relationships, including 13 "Principles to Guide Corporate Relationships." This report responded to AMA's agreement with Sunbeam Corporation and subsequent events. It outlines the steps taken by the Board to ensure that AMA business relationships are appropriate and based on the AMA's vision. The House also received a report of the AMA Board/Staff Liaison Committee on AMA corporate arrangements and management practices.
- The House created an Ad Hoc Committee of the House of Delegates to deal with any items related to the Sunbeam arrangement not fully addressed in a September 1997 "Counsel's Memo" on this matter, with a report to the House at its June 1998 meeting. The House also appointed an Ad Hoc Committee of the House to study the structure, governance, and operations of the House and the Board, using the services of an independent management firm to evaluate key internal decision-making processes, with a report to the House in June 1998.
- The House adopted the action-oriented recommendations in a Board of Trustees Report that outlines the need to transform the value of membership in organized medicine and outlines needed House actions. The House also created a new House of Delegates Task Force on Membership that will report on its efforts to identify and report on ways to increase recruitment and retention of AMA members by the June meeting of the House.

Reference Committee G

- The AMA adopted major new policy on two approaches increasingly used to influence or control the utilization of health services: disease management and demand management through telephone triage. A Council on Medical Service report described similarities and differences between these approaches, reviewed their growth, presented evidence on effectiveness, and established 19 principles that should apply in their operation.
- In response to concerns over the inappropriate use of Milliman & Robertson Guidelines by managed care plans and other health insurers, the AMA will seek the cooperation of the National Committee for Quality Assurance in studying the guidelines. In addition, the AMA will continue to provide assistance to AMA members who report problems with the inappropriate use of Milliman and Robertson Guidelines.
- The House adopted policy to continue to seek enactment of comprehensive legislation on a wide range of patient protection and physician fairness issues, such as disclosure of health plan information to enrollees and prospective enrollees, utilization review and grievance procedures, due process in physician selective contracting decisions, and physician involvement in health plan policies. The AMA will also seek elimination of clauses in managed care contracts allowing refusal to pay for covered services solely because required notification of these services was not reported in a timely manner. The House also established five patient-focused principles for development of rural community health networks.

Reference Committee H

- Responding to growing concern about provision of home health services and the need for greater physician oversight of these services, the AMA adopted policy to inform physicians of their responsibility in certifying home health services. The AMA will also urge the Health Care Financing Administration to clarify the definition of homebound patients and simplify the forms required for certification of home health care services.
- The AMA will increase its efforts to abolish the National Practitioner Data Bank, a clearinghouse of names of all physicians named in malpractice suits. The AMA has long opposed the use of this data as many malpractice suits are settled out of court and a final adverse action has not been taken by a medical licensing jurisdiction.
- The AMA reaffirmed support for the American Medical Accreditation Program (AMAP), calling for medical staffs to use AMAP as the source of information in their appointment, reappointment, and credentialing of medical staff members, and to encourage their members to become AMAP accredited. The AMA did, however, also acknowledge and apologize for communication problems between AMAP and the Federation and will direct attention to improving communication and cooperation with the Federation.
- The AMA will study the new emergence of primary care physicians practicing primarily in hospitals, or "hospitalists" and determine ramifications for continuity of care, quality of care, the physician/patient relationship, and overall costs. The AMA will also study how primary care physicians

will be able to maintain their skills, full scope of practice, and health plan membership if this trend continues.

- **Immediately before the House meeting, the AMA obtained from HCFA an extension of the grace period for enforcement of the evaluation and management (E/M) documentation guidelines.** Physicians may use either the 1994 or the 1997 version of the guidelines until July 1, 1998. The House then adopted policy to reduce documentation requirement burdens for E/M services, ensure that documentation or inadvertent errors in the patient record that do not meet E/M guidelines, does not, in and of itself, constitute fraud or abuse. The AMA will also facilitate additional review and take corrective action on excessive content of the guidelines and work to suspend implementation of all single system examination guidelines until approved by the national medical specialty societies, urge HCFA to establish a test period for the guidelines and adopted policy that medical documentation of items unrelated to the care provided (ie, irrelevant negatives) not be required. In another coding-related issue, the policy was adopted that AMA take steps to ensure that payers do not bundle services inappropriately by encompassing individually coded services under other separately coded services.

PEOPLE

Bruce A. Scott, MD, a Louisville otolaryngologist, is seeking a position on the AMA Board of Trustees in a slot designated for a Young Physician. He currently serves as the sole Delegate to the AMA House of Delegates from the AMA Young Physicians Section.

Stephen P. Wright, MD, has been named Eastern Kentucky University's 1997 Outstanding Alumnus. He is medical director of Kosair Children's Hospital in Louisville.

Ardis D. Hoven, MD, a past president of KMA and current Delegate to the AMA from Kentucky, is running for a position on the AMA Council on Medical Service which deals with managed care, insurance, and reimbursement issues. Dr Hoven currently serves on the Practicing Physicians Advisory Council to HCFA as a nominee of the AMA.

Donald C. Barton, MD, Kentucky's Senior Delegate to the AMA, just completed a 2-year term as Chair of the Southeastern Delegation, a coalition of 13 states, the District of Columbia, and Puerto Rico. During his tenure, the Delegation has supported three candidates from Kentucky for AMA positions.

Will W. Ward, Jr, MD, has received an Alumni Service Award from the University of Louisville. A Louisville physician, Dr Ward has been interested in serving the needy since he was a medical student at the University. His services have included giving charity care at the Mission House and co-founding the Greater Louisville Organization for Health Clinic.

UPDATES

Retention of Medical Records

KMA continues to receive numerous inquiries on how long medical records should be retained in physician offices. Retention of records is important because federal and state auditors may want access to records going back as far as 5 to 6 years. Records are also important in liability claims. Physician offices should keep the following points in mind:

1. In Kentucky, anyone may sue a physician for malpractice one year from the time a problem is discovered. A problem may not be discovered until many years after the physician performs a procedure, so, it is always wise to maintain records indefinitely. Physicians should consult their liability carriers for additional advice.
2. If physicians do not want to maintain records indefinitely, they should maintain them at least 6 years because that is the statute of limitations on prosecution for most fraud and abuse cases.
3. Medicare and Medicaid regulations require that records be kept at least 5 years.

Health Payments 30 Days Late? You Have Recourse

Kentucky law states that any claim "arising under the terms of any contract of insurance shall be paid to the named insured person or health care provider not more than thirty (30) days from the date upon which notice and proof of claim, in the substance and form required by the terms of the policy, are furnished to the insurer." If a plan does not make payment within 30 days, interest at an annual rate of 12% will be charged on the amount.

The law doesn't specify whether this right to payment within 30 days can be contracted away. In other words, a health plan may try to have a physician sign a contract that specifies the plan may pay whenever it wishes relieving them from the obligation to pay within 30 days.

A Plan of Action—

- Inform the health plan in writing that you have not received payment; ask them why and point out that Kentucky law states they must pay within 30 days of receipt of the claim. You may also want to consider telling the plan you intend to contact the state Insurance Commissioner if you are not given a good reason for the nonpayment. Also inform them Kentucky law provides that you are to receive 12% interest on the amount. Always remember, however, that the plan may be able to terminate you from the plan's panel without cause.
- When your contract with the plan comes up for renewal, consider placing clauses in the contract that (1) define a "clean claim," (2) clearly state the plan will pay interest if the payment is late and (3) clearly state the plan will comply with Kentucky state law regarding late payments.
- Physicians may want to purchase a rubber stamp citing the relevant Kentucky law on late payment and stating that interest will accrue on the claim if not paid by a specific date.

E & M Guideline Extension

HCFA is delaying enforcement of the new Evaluation and Management documentation guidelines until July 1, 1998. While the continued use of 1994 guidelines will be accepted, HCFA strongly encourages physicians to begin using the new guidelines now. The new guidelines will be published in the Medicare bulletin and are available on the HCFA Web site: http://www.hcfa.gov.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Barren

Kaukwok Frederick Ho MD — OPH
102 B Lyon Ave, Glasgow 42141
1982, Washington U, St Louis

Boyd

Cecilia D Gaynor MD — ID
2222 Winchester, Ashland 41101
1989, U of Cincinnati

Boyle

Colin R Raitiere MD — FP
109 Daniel Dr, Danville 40422
1977, U of California, San Francisco

Campbell

Anthony W Alvarez MD — P
224 Grandview Dr, Ft Mitchell 41017
1990, U of Kentucky

Christian

Mohammad Y Bhaghani MD — P
108 Hunting Creek Ct, Hopkinsville 42240-4823
1985, Dow, Pakistan

Fleming

Vicki L Verburg MD — GP
RR 1 Box 277, Ewing 41039
1991, U of Louisville

Franklin

Brenda A Osborne MD — PD
4 Physicians Park, Frankfort 40601
1989, U of the West Indies, Jamaica

Fulton

George R Hand MD — IM
300 N Highland Dr, Fulton 42041-1437
1962, U of Autonomous of Neuvo Leon, Mexico

Jefferson

Carla Maria Alcid MD — PD
Division Of Pediatric Emergency Medicine, Louisville 40292
1987, U of the Philippines

Michael G Alt DO — N
1804 Harvard Dr, Louisville 40205-1806
1982, Philadelphia Coll of Osteopathic

Duane E Banet MD — D
101 Chapel Creek Trl, New Albany 47150
1993, U of Cincinnati

Robert O Buse MD — R
10610 Hobbs Station Rd, Louisville 40223-2671
1992, U of Cincinnati

Arnold Michael Conforti MD — S
14007 Hickory Ridge Rd, Louisville 40245
1986, Georgetown

Tim J Conrad MD — OPH
5810 Bonfire Dr, Louisville 40207
1991, Duke

Candace L Embry MD — FP
1544 Lewis Ln, Corydon 47112
1981, U of Kentucky

George F Estill MD — FP
1544 Lewis Ln, Corydon 47112
1980, U of Kentucky

Charles E Gaba MD — IM
2924 Field Ave, Louisville 40206
1994, U of Louisville

Charles M Kodner MD — FP
6003 Maple Hill Way, Crestwood 40014-8819
1994, Washington U, St Louis

Dean F Leslie MD — R
222 S 1st St Ste 600, Louisville 40202
1992, Mayo, Rochester

Rangi J Lim MD — EM
110 Executive Park, Louisville 40207
1994, Louisiana State, New Orleans

Reggie D Lyell MD — FP
400 Dillman Spring Way NE, Corydon 47112
1991, U of Tennessee

Kevin A O'Koon MD — S
3015 Brownsboro Rd Apt 9, Louisville 40206-1544
1992, U of Louisville

Neal J Prendergast MD — U
1807 Knollwood Rd, Louisville 40207-1766
1991, Case Western Reserve U

Vijay Raghavan MD — HEM
10011 Windhill Dr, Greenville 47124
1985, Jawahalal Institute, India

Katherine L Savells MD — PD
236 S Bayly Ave, Louisville 40206
1994, U of Louisville

Lydia E Sims MD — OBG
1105 Windsong Wy, Louisville 40207-2282
1984, U of Pennsylvania

Gregory B Strothman MD — S
6022 Innes Trace Road, Louisville 40222
1991, U of Louisville

John C Tackett DMD — DENT
102 N Harrison St, Salem 47167

Brad Michael Watkins MD — S
250 E Liberty St Ste 300, Louisville 40202
1991, U of Louisville

Kenton

Howard A Anneken MD — AN
72 Superior Ave, Ft Mitchell 41017
1968, U of Louisville

William G Danneman MD — ONC
2865 Chancellor Dr 215, Covington 41017
1976, Ohio State, Columbus

Laurel

Hubert Wayne Williams MD — FP
413 Bomont Ave, London 40741
1982, U of Kentucky

Lyon

David W French MD — FP
403 E Fairview Ave, Eddyville 42038-8237
1991, U of Louisville

Madison

Robin A Reams MD — R
293 Wilson Ln, Berea 40403
1981, U of Kentucky

Arthur Yin MD — IM
103 Dogwood Cir, Richmond 40475-9626
1983, Second Med U of Shanghai

McCracken

Carl W Baker MD — **OPH**
1903 Broadway, Paducah 42001-7199
1993, U of Kentucky

James N Eickholz MD — **FP**
225 Medical Center Dr Ste 101, Paducah 42003
1994, U of Tennessee

Halden H Ford MD — **D**
2255 Medical Center Dr, Paducah 42002-7329
1992, U of Louisville

Timothy J Ranval MD — **S**
225 Medical Center Dr Ste 302, Paducah 42002-7329
1983, U of Louisville

McCreary

Merrill A Winchester MD — **FP**
PO Box 99, Whitley City 42653
1958, U of Louisville

Perry

Jyotin V Chandarana MD — **NEP**
215 W Argyle Cir, Hazard 41701-9432
1977, U of Baroda, India

Pike

Debra R Bailey MD — **PD**
151 Kati Street, Pikeville 41501
1985, U of Louisville

Venkateswara R Dikkala MD — **PD**
PO Box 2665, Pikeville 41502
1986, Andhra U, India

Pulaski

Scott M Stephens MD — **IM**
5 Windy Hills Dr, Somerset 42501-9291
1992, U of Kentucky

Warren

Caryl A Sikora MD — **PUD**
282 Greenview Way, Bowling Green 42103
1988, Wayne State, Michigan

Hugh M Sims MD — **OTO**
PO Box 3380, Bowling Green 42102-3380
1989, Med Col of Alabama

IN-TRAINING

Boone

Jacob William Vincent MD — **FP**

Kenton

James Carson Byrd MD — **FP**
Michael K Dragan MD — **FP**
Tobin Fisher MD — **FP**
Maria Fister MD — **FP**
Kerrick Louis Stout MD — **FP**
Nicole Renee Williams MD — **FP**

DEATHS

Carl Pigman, MD
Whitesburg
1906-1997

Carl Pigman, MD, a retired family practitioner, died December 11, 1997. A 1936 graduate of the University of Maryland School of Medicine, Dr Pigman was a life member of KMA.

Robert E. Buten, MD
Ft. Thomas
1926-1997

Robert E. Buten, MD, a retired ophthalmologist, died December 30, 1997. A 1951 graduate of the University of Cincinnati College of Medicine, Dr Buten was a life member of KMA.

Robert J. Seebold, MD
Louisville
1910-1998

Robert J. Seebold, MD, a retired family practitioner, died January 2, 1998. A 1939 graduate of the University of Louisville School of Medicine, Dr Seebold was a life member of KMA.

Paul S. Combs, MD
Lexington
1945-1998

Paul S. Combs, MD, a radiologist, died January 10, 1998. Dr Combs graduated from the University of Kentucky College of Medicine in 1972 and was an active member of KMA.

Accidental Falls: Their Causes and their Injuries

Alvin S. Hyde, PhD, MD
Publisher: HAI
PO Box 490034
Key Biscayne, FL 33149
1996, 251 pages

This is quite a different book. Written in a comfortable style, almost conversational at times, the words do not read encyclopedic as the author apologizes. By incorporating his family to illustrate, research, and review his work, a confluent and elucidating production resulted. Adopting a paperback texture, with larger print and frequent use of bold, underline, and italics, the reading is easy and the searching is really at a minimum.

Dr Hyde divides his chapters by epidemiology, physics, and medicine initially, respecting the fact that his readership varies from scientist, medical personnel, and other lay interested parties. Although complicated by nature, this material easily digests, and surprisingly stays with you through the duration.

The middle of the book takes the biomedical approach, explaining common things like falling, stumbling, tripping, and what consequences to our bodies result from meeting the resistant ground or other objects. In describing how the environment impacts on this subject, Dr Hyde takes us to prophylaxis, his real cause.

While there may be little to do about our anatomy and physiology, about the weather and the local factors, certainly being aware of potential hazards, constructing safeguards, and anticipating future threats is the message.

His filled bibliography, appendix with available books and videos, and a closing last effort at using formulas to come up with numbers for what happens, all complement a very noble effort.

Stephen Z. Smith, MD
Book Review Author

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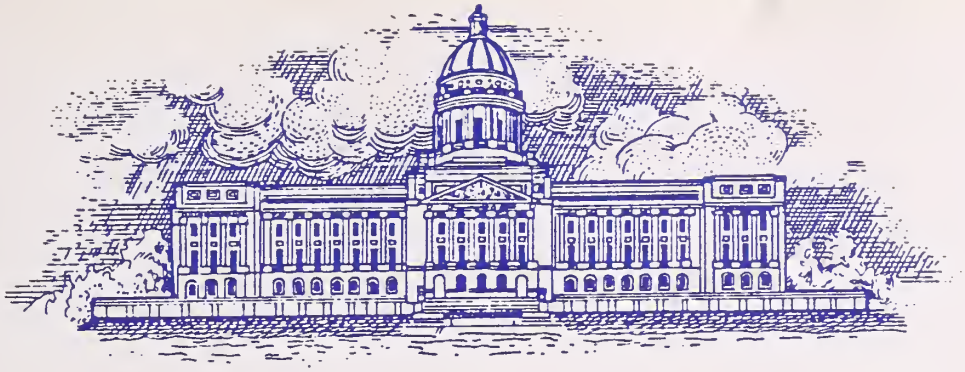

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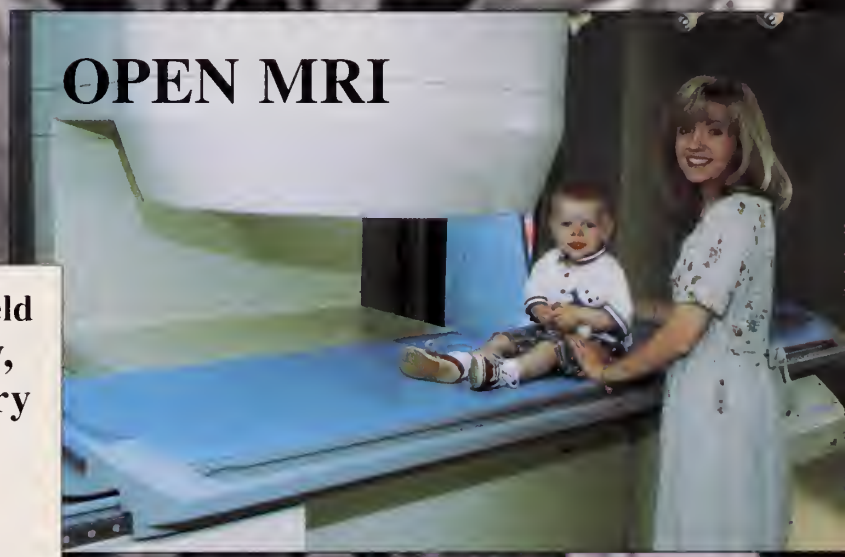

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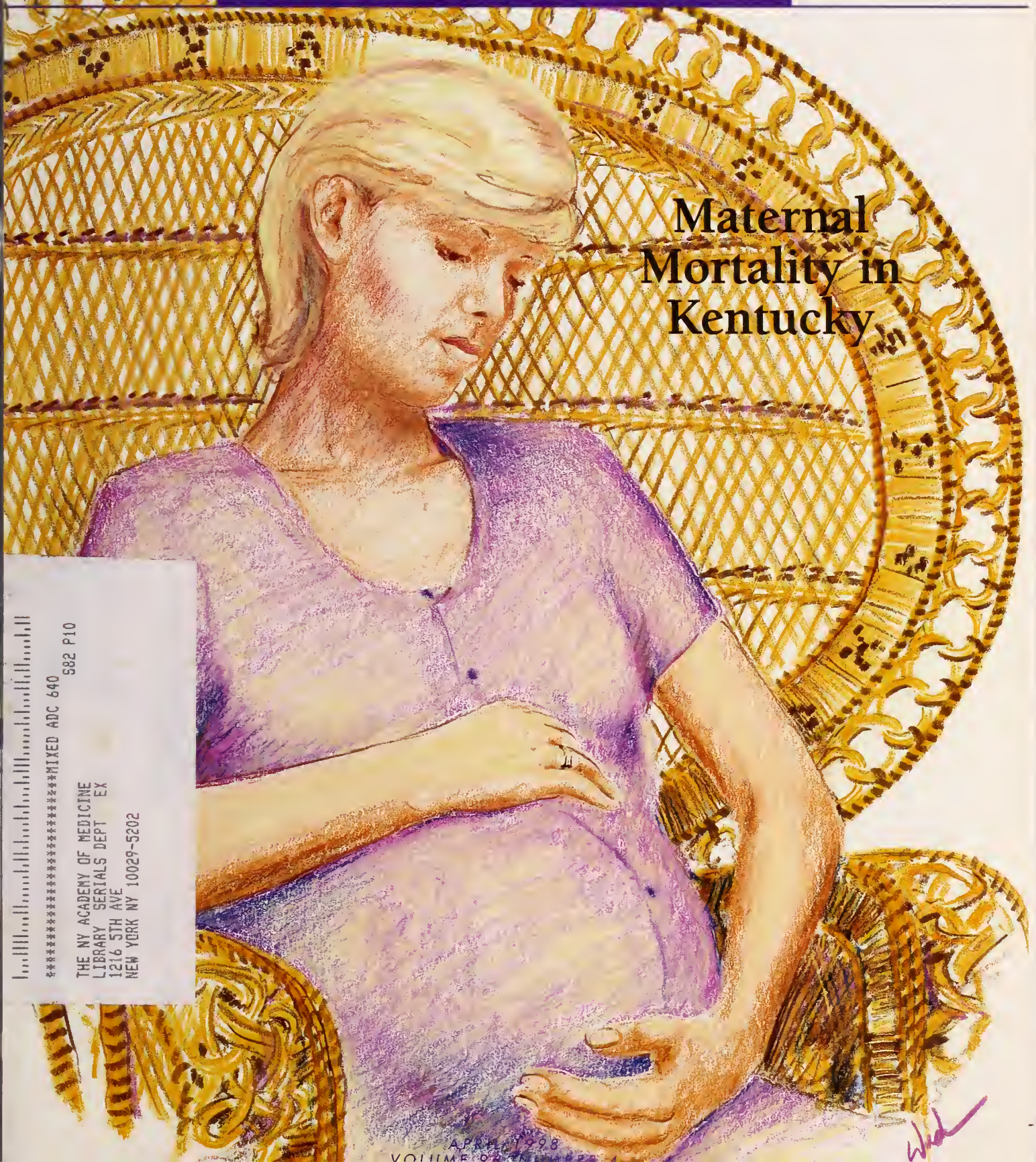
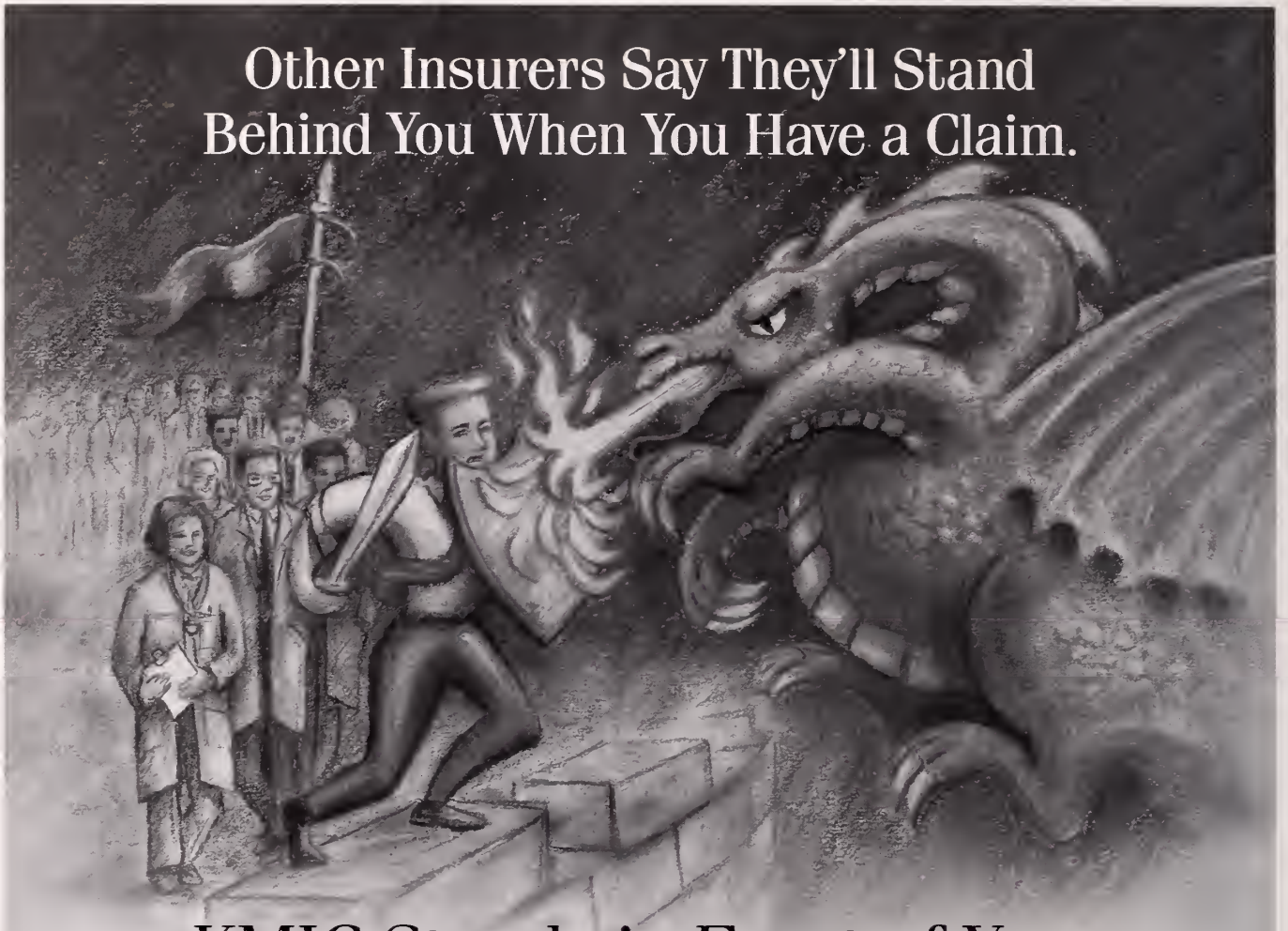


Maternal Mortality in Kentucky

APRIL 1998
VOLUME 96 NUMBER 4

Other Insurers Say They'll Stand Behind You When You Have a Claim.



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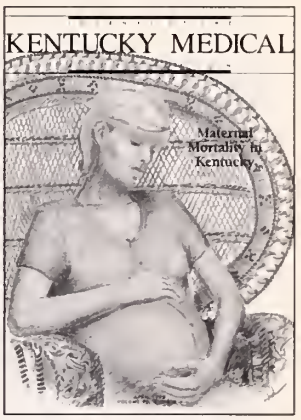

COVER:
Today, the three leading causes of maternal martality in Kentucky mirrar thase af the natian, ie, hemarrhage, pulmonary embolus, and taxemia. This article fram the University af Kentucky Department af OB/GYN and the Kentucky Medical Association Maternal Martality Study Cammittee reviews maternal martality in Kentucky aver the 30 year period af 1966 through 1995.

Artwark by Lee Wade af Eminence, KY.

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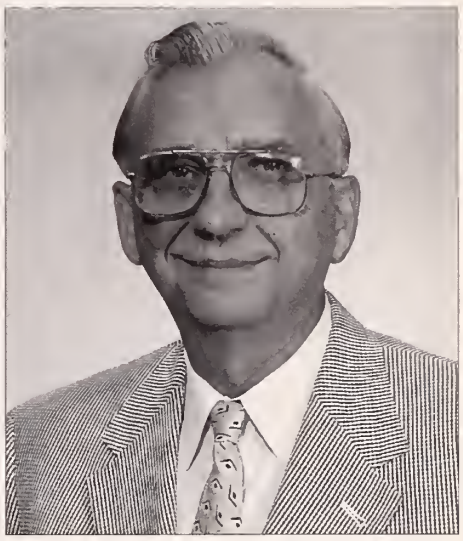

C. Kenneth Peters, MD

Another regular session of the Kentucky General Assembly has come to a close, and there will be much reflection, both pro and con. The one truth, however, that we can all affirm is that the democratic process is alive and well.

On May 26, our primary to select candidates for 1998 elections will take place. How often do you hear your friends say, "My party selected the wrong person, instead of the one that best reflects my views"? When I hear persons say that, I often wonder whether or not they had really involved themselves in the selection process.

You may call it a mid-year resolution, or a personal commitment—call it what you will—but resolve to **involve yourself** in our state and nation's political system in 1998. This year is not a presidential election year, but one third of the seats in the US Senate are at stake, as well as 535 seats in the US House of Representatives. Thousands of seats in state legislatures across the country (including Kentucky) will be filled in 1998. Locally, the future of schools, hospitals and essential social services are in the hands of local governing bodies. Medicaid, managed care, and many other issues are on the table in our local arenas.

Nationally, a priority issue is Medicare. Our AMA has warned us for years that Congress must act to strengthen the financial structure of this program before bankruptcy occurs. Congress will probably take action in 1998; as physicians we must be at the table in developing a long term solution to Medicare funding.

Political involvement can take many forms. It may be as basic as becoming informed about the issues, registering to vote—**and voting**. It may include actively supporting the candidate of your choice. Many physicians and their spouses provide this support by joining KEMPAC. Of even more value to candidates are the many physicians and spouses who serve as campaign workers and volunteers, performing tasks from stuffing envelopes to hands-on campaign management.

As leaders and staff at KMA, we are always delighted to hear from our members when they have a particular issue or concern, and we appreciate the high level of trust our membership has in our organization. The extent of the success of our Association efforts, however, is directly related to our success in the political arena. If you and I are not participating, then we lessen our collective ability to solve our problems. As an organization, we have one of the most effective legislative teams that has ever been assembled in Frankfort.

Recently, a fellow physician called KMA and asked staff to help him identify his legislative representative, which staff was delighted to do. It was a healthy sign that physician was getting involved. All of us enjoy debriefing in the doctor's lounge, but dear friends, if our concern never goes beyond that setting, our voices are never heard where it matters. **Get involved and help us protect quality health care in Kentucky. Get involved and help us protect the integrity of our most precious possession—the doctor-patient relationship.**

Unless we choose to participate, however, our voices and our fundamental rights as citizens are silenced. **Get involved!**

"The extent of the success of our Association efforts is directly related to our success in the political arena. If you and I are not participating, then we lessen our collective ability to solve our problems."

"All of us enjoy debriefing in the doctor's lounge, but dear friends, if our concern never goes beyond that setting, our voices are never heard where it matters."

C. Kenneth Peters, MD
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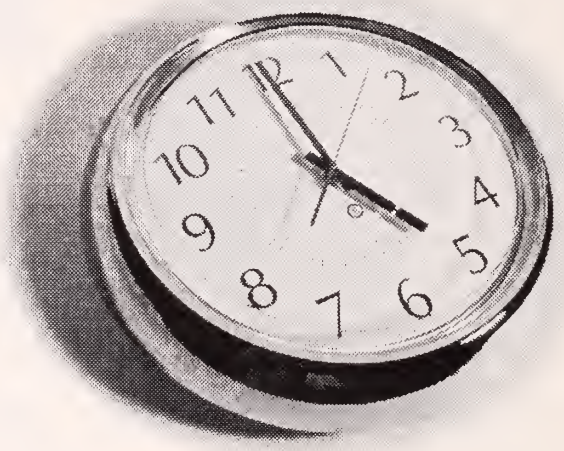
There's a 5:00 meeting about your practice, and you're not invited.



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NEWS FOR KENTUCKY PHYSICIANS

Physician Protections from Any Liability for Serving on Peer Review Panels

by Harry W. Carloss, MD

A hospital owes a legal duty to its patients to exercise reasonable care in the selection of its medical staff and in granting medical privileges. Physicians often participate in the process of selecting medical staff because they are in the best position to provide pertinent input. In order to assure the best and most honest "peer review" is conducted, state and federal governments have provided immunity from lawsuit to those who serve on peer review panels.

The Kentucky legislature has also enacted legislation which said documents regarding peer review are not open to the court system, or, in legalese, "discoverable."[1] The Kentucky courts, however, continue to erode these statutory protections given to peer review records. The legislature has made it very clear that such records are not subject to discovery "in any civil action in any court," but, the latest decision by Kentucky's Supreme Court on this issue says the protection from discovery only applies to actions by physicians against a medical staff, but, does not apply to claims of medical negligence and corporate negligence.[2] The Court's ruling in this area continues to subject peer review documents to discovery in civil trials.

The idea of protecting such records from discovery is not a novel one and almost all states currently have such a law. The law allows for uncolored and frank discussion by peer review organizations by easing the worry of such discussions being open to the court system. Such a policy provides for quality peer review, which is important to provide quality care. The Kentucky Medical Association has continually worked to pass legislation that makes it clear such records are not open to discovery. Our views have also been expressed to administration officials, stressing to them the importance of such records having as much protection as possible.

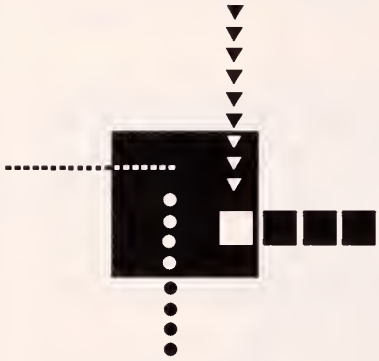
Since peer review records do appear to be subject to discovery, it is important for physicians to protect themselves from lawsuits that may arise as a result of their service on peer review panels. Of course, anyone can sue and that is why it is important to ensure the cost of defending such a suit is incurred by someone other than the physician. The protections discussed below may prevent physicians from incurring the cost of defending themselves in a lawsuit regarding their service on peer review panels.

- Kentucky law provides that a person who has applied for staff privileges waives any claim for damages for any good faith action taken by someone who serves on a peer review panel.[3]
- Physicians may also have protection from lawsuits under the Federal Health Care Quality Improvement Act, which has been incorporated into Kentucky's peer review statute.[4]
- Physicians should be careful when reviewing others within the same specialty. Federal law addresses whether a specialist who is in direct competition with another specialist may review the specialist with which he is in competition.
- Physicians can contract with hospitals to defend, indemnify, or hold physicians harmless for any claim arising out of their service on a hospital's peer review panel.
- By-laws of the hospital itself may provide coverage for physicians who serve on peer review panels. Physicians should ensure this section of the hospital bylaws is incorporated into their contract with the hospital.
- Some hospitals also include provisions in the bylaws of the medical staff which provide that the hospital will defend, indemnify, and hold the medical staff harmless against claims arising out of their performance of peer review functions.
- Physicians should check with their own liability carrier to see if coverage can be obtained for serving on a peer review panel.

Harry Carloss, MD, currently serves as Vice-President of the Kentucky Medical Association.

[1] KRS 311.377(2)
[2] *Leanhart v. Humana, Inc.*, KY., 983 SW2d 820 (1996)
[3] KRS 311.377(1)
[4] 42 USC 11151

Your Success is Our Goal



American Medical Association Organized Medical Staff Section (AMA-OMSS)* Assembly Meeting

June 11-15, 1998
Sheraton Chicago Hotel and Towers
Chicago, Illinois

To succeed in today's health care environment, your medical staff needs the latest information and appropriate skills for meeting the day-to-day challenges of medical practice. By attending this meeting, you can learn about:

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- **Negotiating and resolving conflicts**
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- **Stark II recommendations**
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- **Organized medical staff challenges in the future**
- **Effectively communicating in business practice**
- **PSOs and Medicare risk contracting**
- **Unionizing**
- **E/M Documentation Guidelines**

In addition to these educational offerings, as an AMA-OMSS representative of your medical staff, you can participate in advocacy, policy-making and networking activities. **Our goal is to work with you to identify and address medicine's most pressing issues. We also want to help you increase your knowledge and skill so that together we can best serve the needs of patients, physicians, and the profession.**

To achieve this goal you can:

- Submit resolutions and participate in mode-of-practice and general interest forums to bring your concerns to the forefront.
- Testify at reference committee hearings and vote on actions in a democratic assembly to further AMA's advocacy agenda.
- Attend practical education programs to improve your medical practice, earn **8.5** hours of CME credit** and pay no fee to register!

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* The American Medical Association Organized Medical Staff Section (AMA-OMSS) leads and assists grassroots physicians, individually and in groups, to organize and reclaim their role as medical leaders and advocates for excellence in patient care, professionalism, and the integrity of the patient-physician relationship. We provide practical educational forums, focused policy development, and grassroots support through the Federation.

** The AMA designates this education activity for a maximum of 8.5 hours in category 1 credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

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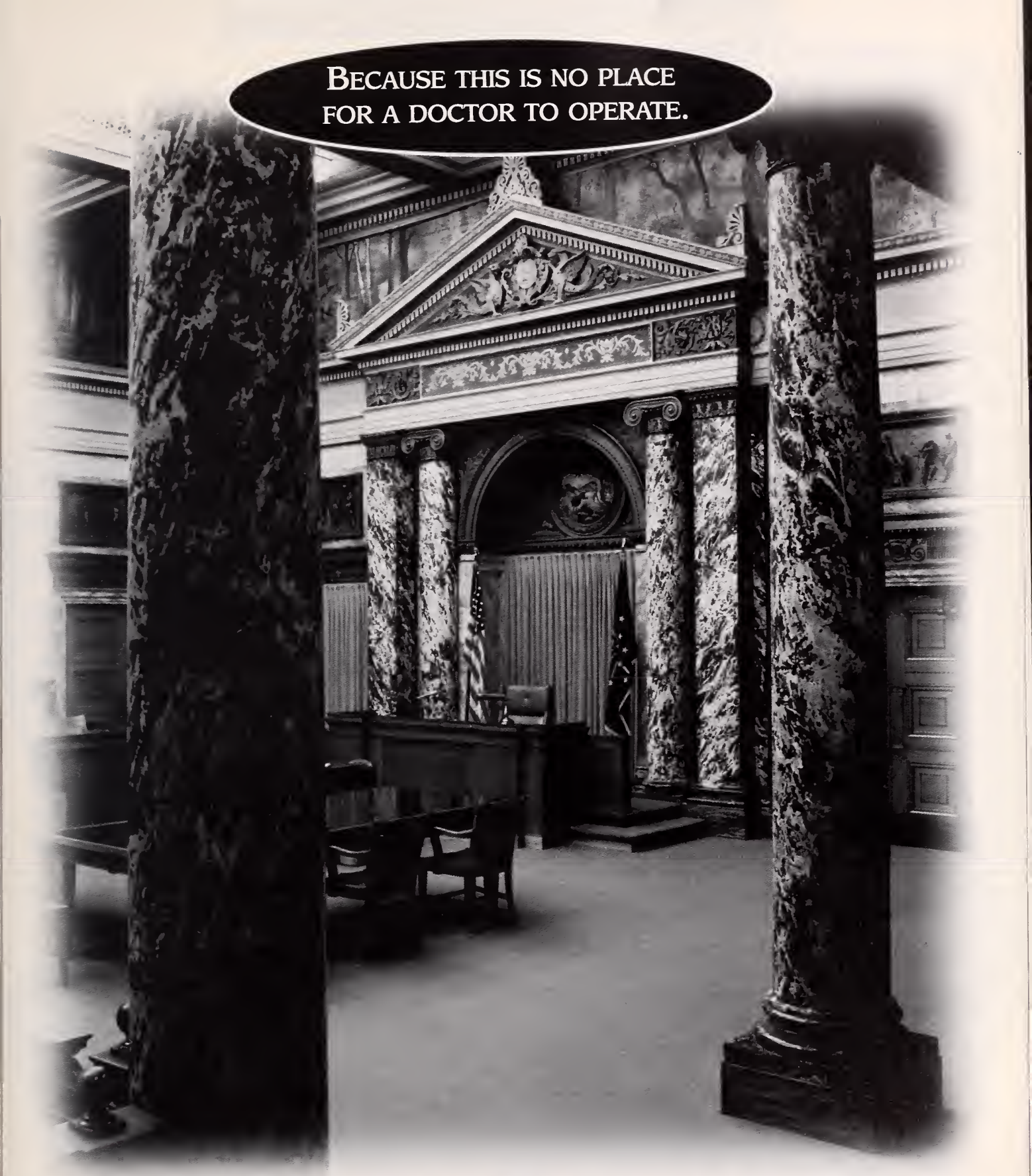

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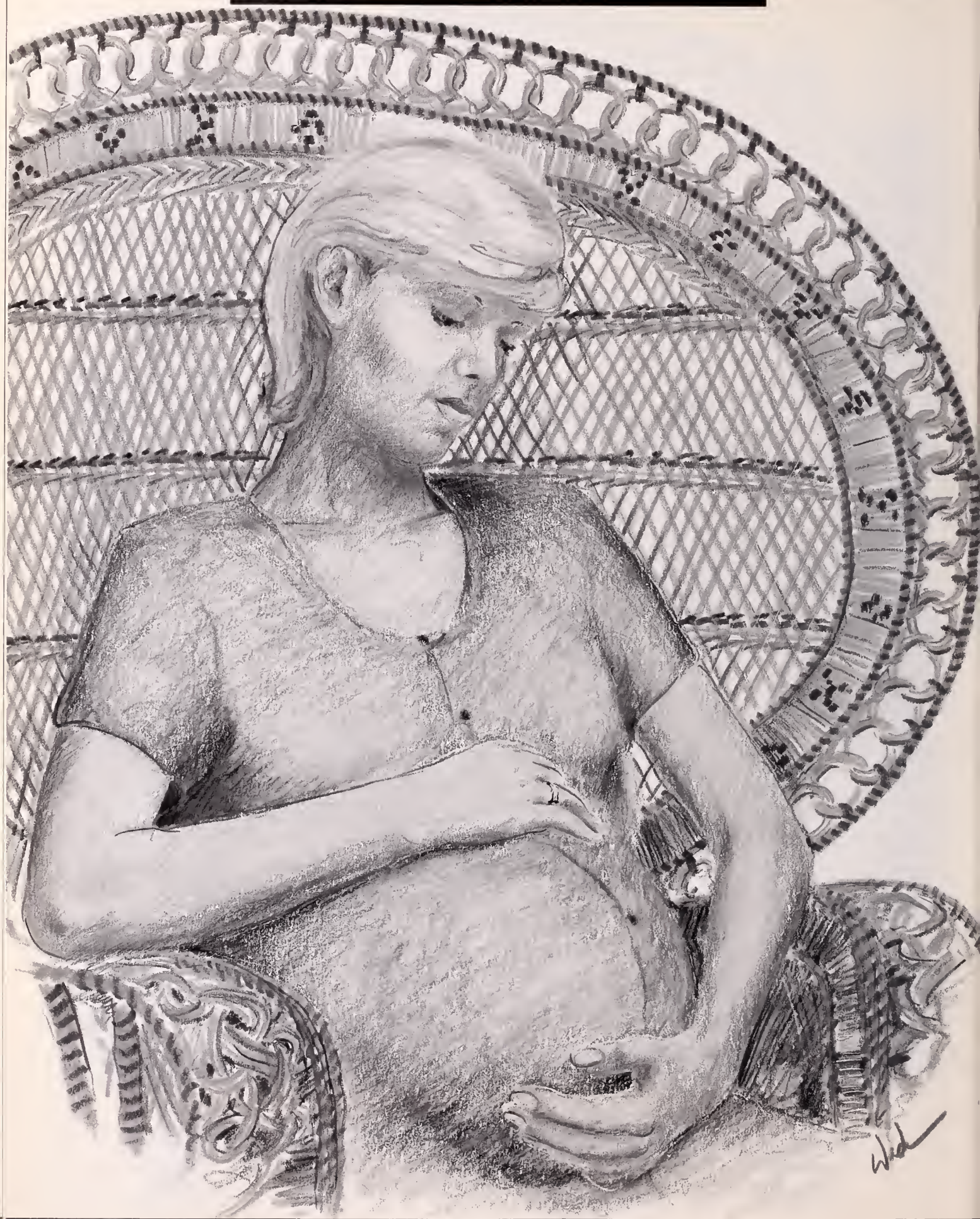

Maternal Mortality in Kentucky

Frank C. Miller, MD; John W. Greene, MD; John A. Petry, MD

This paper reviews maternal mortality in Kentucky over the 30 year period of 1966 through 1995. Data were reviewed from the minutes of the State Maternal Mortality Study Committee and the reports of the State Cabinet of Health Services, State Centers for Health Statistics. There has been a marked fall in the number of births during this 30 years and an even more dramatic reduction in maternal mortality. Identifiable causes for maternal death have changed over the years. Today, the three leading causes of maternal mortality in Kentucky mirror those of the nation, ie, hemorrhage, pulmonary embolus, and toxemia.

Maternal mortality has been tremendously reduced in this country in the last 200 years and more so in the last 50 years.[1] When Mary Todd Lincoln was born in Lexington in the early 1800s, it is said that one out of eight women died during or after pregnancy.[2] Her mother, Eliza, died after the birth of a son in 1825. She had had seven pregnancies in twelve and a half years. Maternal mortality in the United States came under scrutiny in the 1930s when committees of hospitals, health departments, and local medical societies began to collect information on the maternal deaths in their area.

Throughout the nation, despite the best efforts of state health departments' vital statistic divisions, there is a consistent underreporting of maternal deaths.[3-6] The causes for this underreporting are many and vary from state to state, but some of the most common problems are that 1) deaths are coded according to the International Classification of Disease — 9 (ICD-9) codes 630-676, which do not include all of the causes of pregnancy related deaths, 2) states use varying criteria for pregnancy related deaths, ie, some states include all pregnancy related deaths up to 1 year after pregnancy, while others limit the time frame to 3 or 6 months, 3) in some states, death certificates have check boxes to mark pregnancy, but most do not, 4) there is some reluctance to identify pregnancy related deaths because of fears of malpractice litigation. It is estimated that as many as one-half of all maternal deaths are unreported, ie, the deaths are not categorized as pregnancy related.[3,4]

The maternal mortality rate, defined as the number of deaths per 100,000 live births occurring during or within 1 year of pregnancy termination and resulting from: 1) complications of pregnancy itself, 2) a chain of events initialized by pregnancy, 3) aggravation of an unrelated event by the physiologic effects of pregnancy. As previously mentioned, this definition of maternal mortality does not include deaths from accidents, ie, auto accidents, murder, or suicide.

Materials and Methods

In the 1960s, the Maternal Mortality Study Committee (MMSC) was organized by the Kentucky Medical Association with support of the Division of Maternal and Child Health Services of the Kentucky State Health Department. This committee began reviewing all death certificates of females between the ages of 15 and 44 years. The committee meets 1 to 3 times a year depending upon the number of cases. Material is gathered by the state health department from sources in Frankfort and by physicians and/or hospitals reporting to the authors of this paper. On occasion, maternal deaths were obtained from newspaper sources. The committee has rotated members every 3 to 5 years and generally has consisted of 8 to 24 physicians from various geographic areas of the state. A medical student and a resident in obstetrics and gynecology usually attend and take part in discussions. The deaths are reviewed at great length and time is given to etiologic factors. The deaths are classified as direct or indirect obstetrical as well as identifying preventable factors such as physician responsibility, medical care facility availability, and/or lack of patient compliance. It is from the Committee minutes and reports over the past 30-plus years that most of the details on maternal mortality for this report were gathered. A detailed review of all maternal deaths from 1966-1976 was presented by the committee in late 1976.[7]

In its deliberations, the committee considers

From the University of Kentucky Department of Obstetrics & Gynecology, Lexington, KY (Drs Miller and Greene); and the Maternal Mortality Study Committee, Kentucky Medical Association, Louisville, KY (Dr Petry, Secretary).

Reprint requests to Frank C. Miller, MD, Department of Obstetrics & Gynecology, University of Kentucky, Lexington, KY 40536.

whether there is any one institution, physician, or locality with repetitive problems needing further study or action.

In 1974, the State Cabinet for Health Services, State Center for Health Statistics began reporting maternal deaths by International Disease Code — 9 (ICD-9) codes. The state Maternal and Child Health Department provided detailed information on the number and etiology of maternal deaths from the Center of Health Statistics from 1974 through 1995. These two sets of data were then compared in an attempt to determine the most accurate annual number of maternal deaths and the most common complications contributing to maternal mortality in the state of Kentucky during the 30 years from 1966 through 1995.

This report is divided into three 10-year periods, 1966-75, 1976-85, and 1986-95. During the 1966-75 period, the data source was the MMSC report; during the next two 10-year periods, both the MMSC and State Health Statistics were compared.

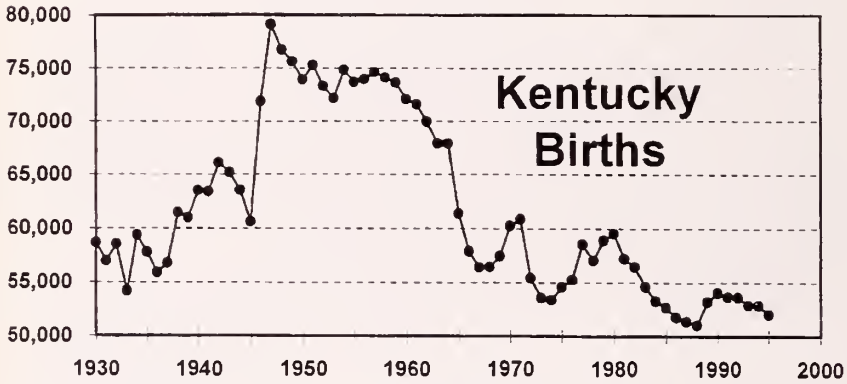

Fig 1 — Annual births in Kentucky from 1930 through 1995.

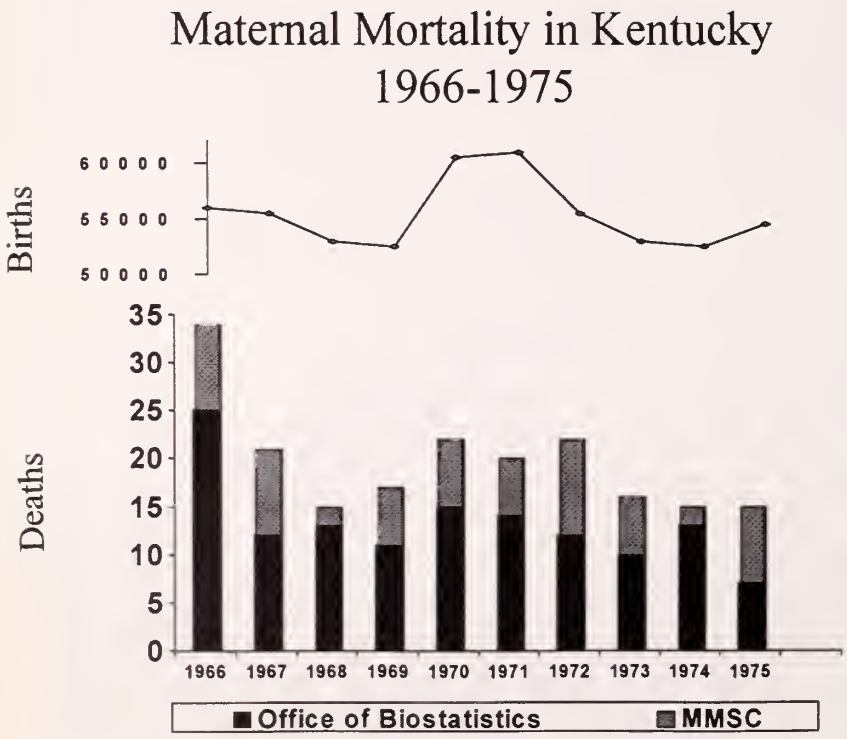

Fig 2 — The number of births per year from 1966-1975 depicted at the top. The total number of maternal deaths as reported by the State Office of Biostatistics is shown in dark bars and those reported by the Maternal Mortality Study Committee in the lighter hatched bars.

Results

Births in Kentucky continue on a downward trend that began in the 1950s. The number of annual births during the past 30 years has ranged from just under 52,000 to 62,000. During the 20 years prior to 1965 (post World War II baby boom) the delivery rate ranged from 70,000 to 80,000. A precipitous drop in births occurred in 1964-65, the year just preceding this review (Fig 1). The birth rate for Kentucky and the nation were strikingly similar until 1980. Subsequently Kentucky has had a lower birth rate than the national average.

Maternal Mortality 1966-76

There is a persistent discrepancy between the total number of maternal deaths reported by the MMSC and the State with the MMSC always reporting more deaths. During the 10 years from 1966-75, the differences ranged from 11 in 1966 to 2 in 1968 and 1974. Keep in mind that the state based their reports on death certificates alone, while the MMSC investigated all female deaths between the ages of 15 to 44 years. The number of maternal deaths annually as reported by the MMSC and the State Office of Biostatistics as well as the number of births are shown in Fig 2. The number of deaths fell rapidly from a peak of 34 in 1966 to 15 in 1975 (MMSC reports) while the number of births initially rose and then fell.

The most frequent cause of maternal death during this period was hemorrhage, followed by sepsis and toxemia (Table 1). There was a marked decrease in deaths due to hemorrhage beginning in 1972 and persisting through 1975. The large category listed as "others" was from the State Office

Table 1. Maternal Deaths in Kentucky MMSC 1966-1975

Cause	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	Tatal
Hemorrhage	11	6	8	4	9	6	2	3	3	1	53
Sepsis	5	8	0	3	3	2	2	4	4	1	32
Taxemia	2	2	2	2	5	5	2	1	2	1	24
Other	16	8	5	8	5	7	16	8	6	12	91
Tatal	34	24	15	17	22	20	22	16	15	15	200

The leading causes af maternal death and the tatal reparted maternal deaths in Kentucky as reported by the Maternal Martality Study Committee far the decades af 1966-1975.

of Biostatics under the exact heading of "all other complications of pregnancy, childbirth, and puerperium." At the time of this paper, that large category could not be more accurately defined. The total number of maternal deaths in this 10 years was exactly 200.

Maternal Mortality 1976-85

The gap between the number of maternal deaths reported by the MMSC and those reported by the state persisted (Fig 3). For this 10 year period, the MMSC reported 92 maternal deaths, while the state recorded only 49. Although during 2 years, 1980 and 1982, the number of maternal deaths exceeded 10, the trend was downward and the total number of deaths for this 10 years was more than 100 fewer than the previous 10 year period.

There was a shift in the most frequent causes of maternal deaths in this time period. Although hemorrhage remained the major killer, pulmonary embolism, both amniotic fluid and vascular, became the second most common cause. During this time, anesthesia was identified as causing 5 deaths, which exceeded the number of deaths for sepsis and toxemia (Table 2). There was still a large category of "other." One or two of these deaths were during or immediately following pregnancy, but not related to the pregnancy. Others are difficult to categorize, ie, congenital

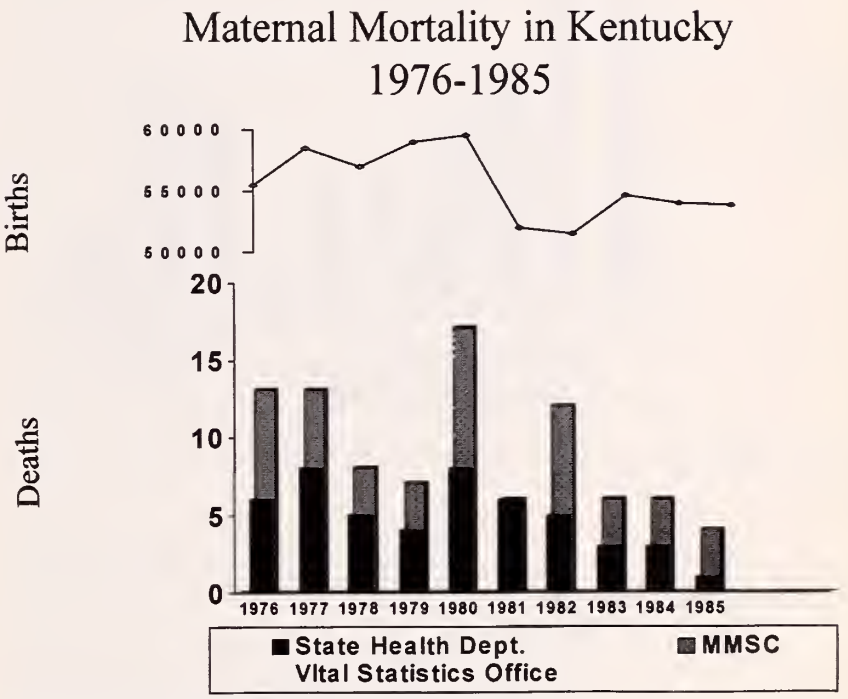

Fig 3 — Shows the number of births and maternal deaths each year from 1976-1985.

Table 2. Maternal Deaths in Kentucky 1976-1985

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	Total
Hemorrhage	2	3	2	2	6	3	4	2	2	1	27
Sepsis	0	2	1	0	0	0	0	0	1	0	4
Taxemia	0	0	0	1	3	0	0	0	0	0	4
Pulm. Embolism	4	3	3	0	3	1	2	1	0	1	18
Anesthesia	3	0	1	0	0	0	0	1	0	0	5
Other	5	4	1	4	5	2	6	4	3	0	34
Tatal	14	12	8	7	17	6	12	8	6	2	92

This table includes a listing of all maternal deaths in Kentucky and the leading causes each year fram 1976-1985.

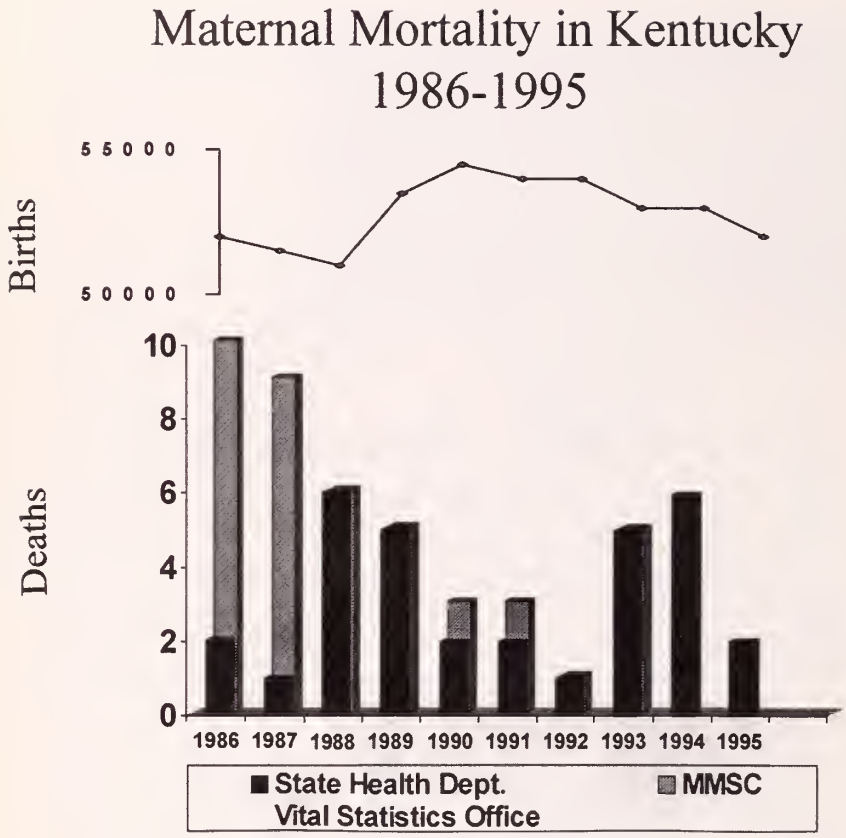

Fig 4 — Depicts the births and maternal deaths for the decade 1986-1995.

abnormalities of the uterus (2 deaths), maternal distress (2 deaths), and other obstetrical conditions (6 deaths).

Maternal Mortality 1986-95

The number of reported maternal deaths continued to decrease. During the most recent 10 years, 39 deaths were reported (Fig 4). While this continued fall is very encouraging, it must be remembered that it may take 3 to 4 years to make sure that all maternal deaths for a given year have been investigated and reported. It is most likely that the number of deaths for the years 1993, 1994, and 1995 will go up once all the potential cases have been investigated. For these 3 years, the State Vital Statistic numbers were utilized.

As in the previous 20 years, hemorrhage was again the leading cause of maternal mortality. Pulmonary embolism, toxemia, and sepsis round out the top four. These four combined, account for 70% of pregnancy related deaths (Table 3). Although infrequent, death from sickle cell crisis was reported four times during this review. As with anesthesia accidents and most cases of hemorrhage and sepsis, these deaths should be preventable.

Discussion

The most difficult state or national death statistic to obtain is maternal mortality.[3-6] Accurate data depends on the awareness of the importance of specific, concise, and timely recording of the causes of death in all women, but especially those during the reproductive years (15-44). It also requires the cooperative efforts of state officials, physicians, and concerned citizens to develop a working system to record, collect, and analyze the data. Kentucky has been fortunate to have an interested and dedicated group. Continued improvement in surveillance will give us a better picture of events associated with pregnancy related deaths and ultimately allow more accurate monitoring of trends within our state and nation.

Further review might answer questions such as the effects of availability of care, physician training, hospital and ancillary support (anesthesia and blood immediately available), transportation, prenatal care, race, cesarean section rates, and many other potential factors on the overall maternal mortality rate. It can serve as a benchmark for the overall number of deaths and the

Table 3. Maternal Deaths in Kentucky 1986-1995

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Total
Hemorrhage	3	0	1	1	2	1	0	3	1	1	13
Sepsis	0	0	0	1	0	0	0	1	0	1	3
Toxemia	2	0	2	1	0	0	0	0	0	0	5
Pulm. Embolism	1	0	1	0	0	1	0	1	2	0	6
Other	4	1	2	2	0	0	1	0	2	0	12
Total	10	1	6	5	2	2	1	5	5	2	39

The number of maternal deaths for this most recent decade are underreported because all maternal deaths have not been reported and investigated at this time.

most common causes of maternal mortality. It is reassuring that the maternal mortality rates continue to decline. Kentucky reports the same four leading causes of maternal mortality as the national data — hemorrhage, sepsis, toxemia, and pulmonary embolism.

In a report by the Center for Disease Control and Prevention, they concluded that more than half of maternal deaths are probably unreported.[3,4] They found that a variety of methods can be used to improve the ascertainment of maternal death, including linkage of birth and fetal death certifications. Kentucky death certificates do not have a space to indicate whether the woman was pregnant, although they did at one time. This mistake should be corrected and this simple notation reestablished.

Lastly, it should be stated that factors other than the traditional hemorrhage, infections, and hypertensive disorders of pregnancy have surfaced. Nationally, HIV infections and trauma have been revealed to be major factors and death may occur outside the traditional 30 to 90 day postpartum. In a recent report, Donnenbery et al[6] concluded that homicide and other injuries are major contributors to maternal mortality and should be (but rarely are) included in the maternal mortality surveillance system.[6]

Conclusion

Maternal mortality in Kentucky, as in the developed countries, has been greatly reduced. One-half the deaths may not be directly related to the pregnancy. Therefore, the etiology of maternal deaths is changing and we must continue to carefully monitor these catastrophic events.

References

1. *Williams Obstetrics*. 20th ed. Appleton & Lange. Simon & Schuster Co; 1997: p3.
2. Baker JH. *Mary Todd Lincoln*. New York, NY: W.W. Norton & Company; 1987: p20.
3. Berg CJ, Atrash HK, Koonin LM, et al. Pregnancy-related mortality in the United States, 1987-1990. *Obstet Gynecol*. 1996;88(2):161-167.
4. Atrash HK, Alexander S, Berg CJ. Maternal mortality in developed countries: Not just a concern of the past. *Obstet Gynecol*. 1995;86:700-705.
5. Stecklov G. Maternal mortality estimation: Separating pregnancy-related and non-pregnancy related risk. *Stud Fam Plan*. 1995;26(1):33-38.
6. Dannenberg AL, Carter DM, Lawson HW, et al. Homicide and other injuries as causes of maternal death in New York City, 1987 through 1991. *Am J Obstet Gynecol*. 1995;172(5):1557-1564.

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Spontaneous Vertebral Artery Dissection Resulting in Wallenberg's Syndrome: A Case Report

Bernd Raphael, MD; Goetz Hans Kloecker, MD

Dissections (D) of vertebral arteries (VA), once thought to be a rare occurrence after significant cervical trauma, now are increasingly found with minor or no discernible history of trauma. This shift is likely due to the fact that the diagnosis can now be made noninvasively using MRI. Spontaneous VAD are predominantly found in middle-aged people. Typically, they present with severe unilateral occipital headache and/or neck pain followed or accompanied by vertebrobasilar ischemic symptoms. We present a case of spontaneous VAD resulting in Wallenberg's syndrome of lateral medullary infarction along with a discussion of risk factors, diagnostic tests, treatment, and prognosis.

Case Presentation

A 30-year-old black male woke up one morning with severe left occipital headache and ipsilateral neck pain which he attributed to his sleeping position. Several hours later he developed ataxia, dysphagia, and left-sided ptosis and blurred vision.

The patient denied any history of trauma, substance abuse, or smoking. He had no significant medical illness in the past except for febrile seizures during early childhood. He was involved in a low-speed motor vehicle accident resulting in a mild whip-lash injury to his neck without any symptoms. Family history was positive for hypertension.

Vital signs were remarkable only for a blood pressure of 172/100. Physical examination revealed left-sided ptosis, miosis, and decreased visual acuity of 20/80 with intact peripheral vision; tongue deviation to the left side; symmetric hyporeflexia; and lateropulsion to the left side when walking. Complete blood chemistries, blood count, lumbar puncture, electrocardiogram, and CT of the head were within normal limits. A MRI/MRA of the head showed occlusion of the left intracranial portion of the VA with a small infarct in the left medullary region.

The patient received intravenous heparin and antihypertensive medication. Warfarin was given for 6 months. The miosis and dysphagia had resolved within several hours of onset, and all other symptoms had improved to near normal over a period of several months.

Discussion

VAD may be divided clinicopathologically into two groups: In one group, the intima separates from the vessel wall obstructing the lumen and patients may present with an ischemic event. In the other group, the adventitia separates from the vessel wall and patients may present with a subarachnoidal hemorrhage.[1] However, the true incidence of VA injuries is difficult to estimate, since a large percentage is probably asymptomatic and remains undiagnosed. A further distinction can be made between intracranial and extracranial VAD.

A VAD is called spontaneous when no history of trauma is elicited. It occurs more often in people in their forties and fifties[2] but has been reported even in children and adolescents.[3] Due to the particular course of the VA through the foramina of the transverse processes of the cervical vertebral bodies and then angulating into the foramen magnum, it seems feasible that sudden head movements exert substantial shearing forces on the vessel walls. Dissections have been reported after violent sneeze,[4] cough,[5] playing tennis[6] or volleyball,[7] aerobic exercises,[8] and even after head turning while driving.[9] Such activities are part of daily life, and the question arises why only a very small number results in clinically overt damage to the VA.

Do certain risk factors predispose a person?

Our patient reported a mild whip-lash injury 6 years ago but had no symptoms at that time. VAD within several weeks or months of trauma have been reported, and a recent MVA within this time frame should prompt a repeat x-ray or CT of the spine to rule out an occult cervical fracture.[10] A traumatic event several years ago has not been reported to be causative. Hypertension has been considered a risk factor for VAD. Several series have shown that patients with VAD have an increased incidence of hypertension over controls.[11] Other factors implicated in the genesis of VAD are cystic medial necrosis, fibromuscular dysplasia, Marfan's syndrome, homocystinuria, congenital or degenerative changes in the arterial wall, and anatomical or pathological characteristics of the VA.[1,12]

Key features suggesting VAD are headache and neck pain and may be caused by irritation to nerve fibers which have been found to innervate the blood vessels.[13] Since headache and neck pain are frequent complaints in the patient population, it is essential to focus on specific characteristics when taking the history. It should be asked whether there is a change from previous headache or neck pain, whether the pain is unilateral, localized posteriorly, sharp in quality, severe in intensity, with sudden onset, monophasic with gradual remission lasting 1 to 3 weeks.[14] While these features are suggestive of VAD, one should keep in mind that VAD may present without any pain or with different types of headache or neck pain.

Neurologic deficits associated with VAD vary widely depending on the localization, size, and number of the infarcted areas, and various syndromes have been described.[15] Microvasculature which branches off directly from the VA, larger branches like the posterior inferior cerebellar artery, or even the basilar artery may partially or completely occlude. Thromboemboli may form and cause more remote damage. Our patient developed Wallenberg's syndrome which is a common complication of VAD.[2,15] Ataxia, dysphagia, and Horner's syndrome were due to a small infarct in the lateral medulla. His impaired visual acuity may have been the result of a thromboembolus to the carina.

While MRI has largely replaced angiography in diagnosing and following VAD, other noninvasive modalities have been proposed. Doppler ultrasonography of the VA is technically difficult but in skilled hands may be of value in following extracranial VAD.[16] Dynamic CT scanning is possibly more useful than regular CT,[17] but bony artifacts make the documentation of brain stem pathology disappointing. Transcranial doppler alone is not helpful in detecting VAD but may be of benefit when combined with duplex ultrasonography.[18] MRI seems to be the test of choice because it is noninvasive and its sensitivity and specificity are close to that of angiography. MRI findings diagnostic for VAD are intramural hematoma, intimal flap, and enhancement of wall and septum.[19] Attention should be paid to the contralateral VA and carotid arteries since often more than one vessel is involved.[2]

Treatment guidelines for VAD are not established at present. This is partly due to the fact that the allover incidence of VAD is rare, and most cases have a favorable outcome with or without treatment.[2] Treatment varies with the type of VAD. Dissections involving the adventitia and resulting in subarachnoid hemorrhage and/or aneurism are often treated neurosurgically. VAD involving the intimal layer and resulting in ischemic events are often treated conservatively with immediate anticoagulation once intracranial hemorrhage has been excluded,[15,20] and surgery is reserved for a few select cases where, eg, multiple emboli complicate the course of the disease.[21] Patients with spontaneous VAD are generally young and otherwise healthy; therefore, contraindications to or complications from anticoagulation are rarely encountered. Whether to use intravenous heparin with or without subsequent warfarin and the duration of treatment remains the call of the treating physician. Most affected people will recover completely or near completely.[2] The positive outcome may partly be due to the fact that the endothelial response upon vascular occlusion to excrete thrombolytic substances,[22] as well as other repair mechanisms, are likely to be intact in these young patients as compared with the arteriosclerotic vessels of older stroke patients.

With easier recognition of spontaneous VAD due to the advent of noninvasive testing, more cases are likely to be diagnosed and followed. This should raise the opportunity to compare different therapeutic approaches in prospective randomized trials in order to develop treatment guidelines and for identification and management of possible risk factors.

References

1. Sasaki O, Ogawa H, Koike T, et al. A clinicopathological study of dissecting aneurisms of the intracranial vertebral artery. *J Neurosurg.* 1991;75:874-882.

2. Mokri B, Houser OW, Sandok BA. Spontaneous dissections of the vertebral arteries. *Neurology.* 1988;38:880-885.
3. Lewis DW, Berman PH. Vertebral artery dissection and alternating hemiparesis in an adolescent. *Pediatrics.* 1986;78:610-613.
4. Gutowski NJ, Murphy RP, Beale DJ. Unilateral upper cervical posterior spinal artery syndrome following sneezing. *J Neurol Neurosurg Psych.* 1992;55:841-843.
5. Herr RD, Call G, Banks D. Vertebral artery dissection from neck flexion during paroxysmal coughing. *Ann Emerg Med.* 1992;21:88-91.
6. Roualdes G, Lartigue C, Boudigue MD, et al. Dissection of the extracranial vertebral artery after a tennis match. *Presse Medicale.* 1985;14:2108.
7. DeBehnke DJ, Brady W. Vertebral artery dissection due to minor neck trauma. *J Emerg Med.* 1994;12:27-31.
8. Pryse-Phillips W. Infarction of the medulla and cervical cord after fitness exercises. *Stroke.* 1989;20:292-294.
9. Hinse P, Thie A, Lachenmayer L. Dissection of the extracranial vertebral artery: Report of four cases and review of the literature. *J Neurol Neurosurg Psych.* 1991;54:863-869.
10. Tulyapronchote R, Selhorst JB, Malkoff MD, Gomez CR. Delayed sequelae of vertebral artery dissection and occult cervical fractures. *Neurology.* 1994;44:1397-1399.
11. Chiras J, Marciano S, Vega Molina J, et al. Spontaneous dissecting aneurism of the extracranial vertebral artery (20 cases). *Neuroradiology.* 1985;27:327-333.
12. Davis JM, Zimmerman RA. Injury of the carotid and vertebral arteries. *Neuroradiology.* 1983;25:55-69.
13. Arbab MAR, Wiklund L, Svendgaard NA. Origin and distribution of cerebral vascular innervation from superior cervical, trigeminal and spinal ganglia investigated with retrograde and anterograde WGA-HRP tracing in the rat. *Neuroscience.* 1986;19:695-708.
14. Silbert PL, Mokri B, Schievink WI. Headache and neck pain in spontaneous carotid and vertebral artery dissections. *Neurology.* 1995;45:1517-1522.
15. Sturzenegger M. Vertebral artery dissection. Clinical aspects, non-invasive diagnosis, therapy — observations in 14 patients. *Nervenarzt.* 1994;65:402-410.
16. Rother J, Schwartz A, Rautenberg W, Hennerici M. Magnetic resonance angiography of spontaneous vertebral artery dissection suspected on Doppler ultrasonography. *J. Neurol.* 1995;242:430-436.
17. Soper JR, Parker GD, Hallinan JM. Vertebral artery dissection diagnosed with CT. *Am J Neuroradiol.* 1995;16:952-954.
18. Sturzenegger M, Mattle HP, Rivoir A, et al. Ultrasound findings in spontaneous extracranial vertebral artery dissection. *Stroke.* 1993;24:1910-1921.
19. Hosoya T, Watanabe N, Yamaguchi K, et al. Intracranial vertebral artery dissection in Wallenberg Syndrome. *Am J Neuroradiol.* 1994;15:1161-1165.
20. Provenzale JM. Dissection of the internal carotid and vertebral arteries: imaging features. *Am J Roentgenol.* 1995;165:1099-1104.
21. Alexander JJ, Glagov S, Zarins CK. Repair of a vertebral artery dissection. Case report. *J Neurosurg.* 1986;64:662-665.
22. Miles L, Levin E, Plow E. Localization of fibrinolytic proteins on peripheral blood cells and endothelial cells. *Circulation.* 1986;74(Suppl II):246.

Warfarin Vs Enoxaparin for Deep Venous Thrombosis Prophylaxis After Total Hip & Total Knee Arthroplasty: A Cost Comparison

Inigo Garcia-Zozaya, MD

Background *— Total joint replacements are high-risk procedures for development of deep venous thrombosis (DVT) and pulmonary embolism (PE), therefore, routine pharmacological prophylaxis should be instituted in all cases. Cost-containment has become an important factor with the present changes in health care. This report presents an economic model for DVT prophylaxis after total hip and total knee arthroplasty (THA & TKA) that approximates closely to the current standards in orthopedic practice, and encourages the balance of clinical and economic considerations in patient care management.* ***Methods*** *— A simplified cost-effectiveness (cost-minimization) analysis, from the consumer's perspective, between Warfarin and Enoxaparin for DVT prophylaxis after THA and TKA, for a total of 15 days, in both inpatient and outpatient settings was used. The costs of drugs, laboratory, and home care services were evaluated through surveying three different providers in each category and obtaining the mean value for each of the services supplied. All providers were located within the Louisville, KY, metropolitan area. Data collection took place in October 1996.* ***Results*** *— The main outcome measure was the difference in cost between the two drugs when all factors associated with therapy were considered. The overall cost of DVT prophylaxis with Enoxaparin was somewhat less expensive ($925.38) when compared to Warfarin ($971.77).* ***Conclusions*** *— Within the limitations of this study Enoxaparin was slightly more cost-effective than Warfarin for venous thromboembolism prophylaxis after total hip and knee arthroplasty.*

Deep venous thrombosis (DVT) remains a major cause of disability and death in all patient populations. It is estimated that venous thrombosis and pulmonary embolism (PE) are associated with approximately 500,000 hospital admissions in the United States each year.[1] About 250,000 cases of clinically recognized DVT occur each year in patients hospitalized in acute care hospitals in this country, and over 100,000 patients die each year as a result of pulmonary embolism in the United States.[1,2] The magnitude of the problem is felt to be much greater since there is no data available from nonacute care facilities, such as rehabilitation hospitals, where the incidence of PE may be higher.[2]

Clinical risk factors for venous thrombosis include advanced age, obesity, malignant disease, prior thromboembolic disease, immobility, major trauma, and major surgery, particularly those procedures involving the abdomen and lower extremities. Without prophylaxis the incidence of DVT after general surgery is about 25%; it rises to over 50% after total hip replacement, and even higher after total knee reconstruction.[2-4] All patients undergoing elective total joint replacement should receive routine pharmacological prophylaxis against DVT,[1,2,5] unless absolute medical contraindications exist.

Venous thromboembolism may be unrecognized due to the clinically silent nature of the disease. Both deep venous thrombosis and pulmonary embolism manifest few specific symptoms, and the clinical diagnosis is insensitive and unreliable.[2] For this reason, knowledge of specific clinical risk factors in individual patients and awareness of the incidence of DVT in patient categories where the risk has been defined by epidemiological studies should be the primary considerations when thinking of thromboprophylaxis.

There are currently three accepted pharmacologic therapy alternatives for thromboembolic prophylaxis: adjusted-dose unfractionated-heparin,

From the University of Louisville Department of Internal Medicine and the Division of Physical Medicine and Rehabilitation, Frazier Rehab Center, Louisville, KY.

low-molecular-weight heparins, and warfarin. Heparin is a heterogenous polysaccharide mixture with an average molecular weight of 12,000 to 15,000 daltons. Its mechanism of action is due to an interaction with antithrombin III and enzymes of the coagulation pathway including thrombin (factor IIa) and factors IXa, Xa, XIa, and XIIa. The activated partial prothrombin time (aPTT) measures the intrinsic clotting system (factors VIII, IX, XI, and XII), as well as the factors in the final common pathway (factors II, V, and X). Clinically, the aPTT measures the interaction of heparin on the coagulation system. The short duration of the drug's pharmacologic action requires multiple doses per day to achieve maximal efficacy. Consequently, dosing regimens must be individualized according to the aPTT. Because of the constant monitoring that is necessary, the use of adjusted-dose heparin in the outpatient setting is more difficult to implement and has lower patient acceptance than enoxaparin or warfarin. It is administered subcutaneously.

Enoxaparin is a low-molecular-weight heparin obtained by the depolymerization of a benzyl ester of natural heparin. The average molecular weight of enoxaparin is approximately 4,500 daltons. Compared with heparin, the anti-Xa activity of enoxaparin is equivalent and the anti-IIa activity is lower. Due to the limited effect of enoxaparin upon factor IIa, routine monitoring of the aPTT is not required in the manner it is with heparin. It is administered subcutaneously in standard dosing regimes, usually twice a day.

Warfarin interacts with the vitamin K-dependent coagulation factors (II, VII, IX, and X) and the anticoagulant proteins C and S. Clinically, the prothrombin time (PT) measures the interaction of warfarin on the coagulation system. Numerous factors, alone or in combination, including changes in diet, physical state and concomitant medications, may influence the response of the patient to warfarin therapy. Because warfarin is not always predictable in its antithrombotic or anticoagulant properties, prothrombin time requires careful monitorization. Treatment, therefore, is individualized. It is administered orally.

Cost-effectiveness and Pharmacoeconomic Models for DVT Prophylaxis

Most experts agree that thromboprophylaxis of any kind is more cost-effective than no prophylaxis or general diagnostic surveillance and selective treatment.[2,3] Several reports support the cost-effectiveness of the various pharmacological approaches in the prevention of venous thromboembolism.[4,6-12] A review of these studies is beyond the scope of this report.

In the recent literature there are primarily two economic models for DVT prophylaxis after total joint replacement with the three pharmacological alternatives accepted today. Bakst[13] reported a pharmacoeconomic comparison between low-dose Warfarin (the dose that maintained prothrombin time (PT) at an international normalization ratio between 2.0 and 3.0), Enoxaparin (30 mg administered twice daily), and fixed-dose Heparin (5,000 Units three times a day). The length of prophylaxis was 7 days for both inpatient and outpatient populations. The variables evaluated included drug costs, laboratory costs (not charges), home care costs, and costs of the treatment of bleeding complications, DVT, and non-fatal PE (the incidence of which was obtained from meta-analysis and individual studies). The results demonstrated that the total cost of Enoxaparin therapy ($341.40 per patient) was less than either Warfarin ($590.26 to $640.50 per patient) or fixed-dose Heparin ($434.77) per patient). Although this report led to the addition of Enoxaparin to the formulary of the Cleveland Clinic (with the proviso that it be restricted to orthopedic surgery), two considerations need to be made about the study. First, from the methodological standpoint, the evaluation of actual costs for some services and charges for other ones may lead to significant differences in the total cost of therapy. Second, from a clinical viewpoint, the short length of treatment, 7 days, does not correlate with the treatment protocols in several clinical trials, prospective studies, and analytic models in which at least 7, and usually 14 days of post-operative prophylaxis were used.[6,14-20] Additionally, recognized experts on venous thromboembolic disease recommend 2 to 3 weeks.[21]

In June 1996 Carter and Brookfield[22] reported an economic model and outpatient thromboembolic prophylaxis guidelines after orthopedic surgery by comparing Warfarin (5 mg a day) and Enoxaparin (30 mg twice a day). Prophylaxis was started at the time of discharge and continued for 6 weeks. The economic variables included drugs, home care services, and laboratory costs. In the Warfarin protocol, PT and partial thromboplastin time (PTT) were monitored twice a week for the first 2 weeks, once a week for the following 2 weeks, and once every other week for the balance of a 6-week period, and platelet counts on weeks

1, 2, 3, 4, and 6. In the Enoxaparin protocol no monitoring of PT or PTT was required and platelet counts were monitored at weeks 1 and 2. Costs for professional services were determined by averaging the fees from three home care agencies, therefore representing the perspective of the consumer. Costs of drugs were determined by submitting five dummy claims to insurance companies, hence, representing the perspective of the payer. The results demonstrated that the first 3 weeks of therapy with Enoxaparin ($658.38) cost an almost equivalent amount as the first 3 weeks of Warfarin therapy ($634.76). After 3 weeks of treatment, the cost of Enoxaparin was greater than Warfarin. One important consideration about this study was that it did not consider the cost of thromboembolic prophylaxis during the immediate post-operative period, which can lead to significant differences in the global cost of therapy. The initiation of DVT prophylaxis postoperatively (with either Warfarin or Enoxaparin), and even pre-operatively (with Warfarin) is well documented in previous reports.[4,6,14-20,23,24] Additionally the consideration of the consumer's perspective (actual charge) for some variables, and the payer's perspective (actual reimbursement) for others, increases the confusion with regard to the real overall cost of treatment. Based on these comments this investigator considered both economic models of limited application for the development of practice guidelines in DVT prophylaxis after total joint replacement.

Pharmacoeconomic Study

This study presents a pharmacoeconomic comparison for DVT prophylaxis after total hip and knee arthroplasty between Warfarin and Enoxaparin, started postoperatively, and continued in the outpatient setting. The purpose of this report is twofold: First, to present an economic model that approximates closely to the standards of current orthopedic practice, based on the review of the literature and the most recent recommendations from experts in the field of DVT prophylaxis, and, secondly, to provide physicians, hospital decision-makers, and third-party payers with valid information in order to balance considerations of clinical value and economic impact in patient care management.

Design

1. Drugs evaluated — The Warfarin protocol called for an initial 10 mg dose given post-operatively, to follow with 5 mg per day. This simplification may underestimate the cost of Warfarin because additional costs could be incurred if dosage adjustments and additional monitoring were needed for those patients whose PT and/or PTT levels were not within the desired range. The protocol for Enoxaparin included 30 mg twice a day, starting in the immediate post-operative period. For the purposes of this study it was assumed that the efficacy and safety of either regimen were identical.

2. Length of treatment — Prophylaxis was started within 12 hours post-operatively and continued through the inpatient and outpatient periods, for a total of 15 days. This length of therapy was determined based on the following factors: (A) The peak incidence of DVT has been reported to occur between days 5 and 10 following either total hip or knee replacement surgery,[25] and (B) Although the formal recommendations are 6 weeks of treatment after total knee replacement[5] and no formal agreement exists after total hip arthroplasty, most experts agree that prophylaxis after total joint replacement (hip or knee) should be continued until the patient is spending the majority of his/her day ambulating with or without external aides.[4,18,25] Recognized specialists on DVT prophylaxis recommend 10 to 20 days.[21] Of the total 15 days, the prophylaxis was administered while in the hospital for the first 3 days, followed in the outpatient (home) setting for the remaining 12 days, based on the current average discharge from the hospital (between days 3 through 6).[25]

3. Laboratory Data — For the Warfarin protocol the evaluation included daily PT and PTT during the inpatient stay; PT every 3 days and PTT once a week in the outpatient period; complete blood counts, including platelets (CBCs) were monitored once before discharge, and then once a week in the outpatient setting. Enoxaparin prophylaxis called for CBCs once in the inpatient setting before discharge, then twice (once a week) during the outpatient period. The rationale behind this monitorization protocol was based on the following factors: (A) The close monitorization required in order to detect any post-operative bleeding. (B) Although the PTT is normally used to monitor therapy with unfractioned heparin, a sizable subset of patients (19.3%) on Warfarin prophylaxis are prone to post-operative bleeding (26.3%) due to abnormal elevations of their PTT (greater than 50 seconds), whereas the control PT value is in the desired range. Those patients

Table 1. Warfarin Praphylaxis

	Mean Cast ($)	Cumulative Cast ($)
Inpatient:		
10 mg pa past-ap	2.00 × 5 dases	10.00
5 mg pa qd × 3 days		
PT qd × 3 days	31.63 × 3	94.89
PTT qd × 3 days	41.27 × 3	123.81
CBC qd × 3 days	40.26 × 3	120.78
Outpatient:		
5 mg pa qd × 12 days	11.19/12 dases	11.19
PT q 3 days	23.16 × 4	92.64
PTT q week	34.33 × 2	68.66
CBC q week	29.58 × 2	59.16
Hame Care q 3 days	97.66 × 4	390.64
		Tatal: 971.77

po = arally; qd = every day; PT = Prathrambin Time; PTT = Partial Thramboplastin Time; CBC = Camplete Blaad Caunt, including Platelets; q = every.

Table 2. Enoxaparin Praphylaxis

	Mean Cast ($)	Cumulative Cast ($)
Inpatient:		
30 mg s.c. bid × 3 days	37.91 × 6 dases	227.46
CBC × 1 day	40.26	40.26
Outpatient:		
30 mg s.c. bid × 12 days	403.18/24 dases	403.18
CBC q week	29.58 × 2	59.16
Hame Care q week	97.66 × 2	195.32
		Tatal: 925.38

s.c. = subcutaneausly; bid = 2 times a day; CBC = Camplete Blaad Caunt, including Platelets; q = every.

demonstrating an abnormal response to warfarin therapy, as manifested by a significant elevation of the PTT, are clearly at an increased risk of post-operative hemorrhage. Based on their study, Paiement et al[26] formally recommended routine monitoring of Warfarin therapy by the PTT as well as the PT in the first 7 to 10 post-operative days. (C) Moderate thrombocytopenia has been reported in 1.9% of patients receiving Enoxaparin, therefore periodic monitoring of CBCs, including platelets, are recommended as a routine procedure.[27]

4. Home Health Services — Included a skilled nursing visit and blood drawing.

Methods

The costs of drugs, laboratory, and home health services represent the consumer's perspective, therefore, they illustrate the actual charges for the respective services supplied (inpatient pharmacy and laboratory, outpatient pharmacy and laboratory, and home care agency). The consideration of drug acquisition costs and providers' specific agreements were disregarded for the purposes of simplification and standardization in this study. This investigator opted for the dollar figure from the consumer's standpoint since it represents the actual cost of medical care called upon society as a whole. Costs for all data variables were determined through surveying three different providers for each service and obtaining the mean value for each category. All providers were located within the Louisville, Kentucky, metropolitan area. Data gathering took place during October 1996.

Results and Conclusions

The results of this economic model (see Tables 1 and 2) indicate that Enoxaparin ($925.38) was slightly less expensive than Warfarin ($971.77) for the prevention of DVT after total joint replacement, when all the costs associated with therapy were considered. Based on these results the small difference in cost should not affect the choice of drugs used; therefore, in this investigator's opinion, clinical factors alone should influence the decision on which prophylactic regimen is to be utilized in each individual patient.

The author encourages the reader to exercise caution when interpreting these results due to the bias introduced with the assumptions that have been made. Additionally, there are also possible questions about the ability to generalize these results to other clinical settings. Notwithstanding these reservations, this economic evaluation supplies valid information for health care providers in the aforementioned community in order to balance clinical and financial considerations in venous thromboembolism prophylaxis after total joint replacement. Further studies in specific clinical settings and individual health care markets may be required to assist in the development of protocols for patient care management.

Discussion

Two important observations need to be kept in mind when analyzing pharmacoeconomic evaluations. First, from the economic standpoint, the rapid changes in healthcare that are taking place today are likely to affect the overall costs of care through the integration of health care services and the development of agreements between

providers, including physicians, hospitals, the pharmaceutical industry, and ancillary services. Second, from the clinical standpoint, using economic models to assist in the development of practice guidelines is a necessary evil in this era of cost-containment. By doing so the medical community runs the risk of placing more emphasis on cost-avoidance than on clinical outcomes. Physicians need to be reminded that treatments should be individualized according to specific clinical risk factors in each patient, and play a key role, along with other professionals, in the development and implementation of universal protocols for medical treatment. This investigator gladly is surprised with the fact that this is already a reality in some parts of the country.[28]

Table 3. Cost of Services by Individual Providers

1. Hospital A.
   - Inpatient Pharmacy: Warfarin 5 mg $1.81
     Enoxaparin 30 mg $25.80
   - Outpatient Pharmacy: Warfarin 5 mg × 12 doses $11.88
     Enoxaparin 30 mg × 24 doses $465.12
   - Inpatient Laboratory: Prothrombin Time $25.08
     Partial Thromboplastin Time $27.59
     Complete Blood Count, including Platelets $37.07
2. Hospital B.
   - Inpatient Pharmacy: Warfarin 5 mg $2.75
     Enoxaparin 30 mg $57.04
   - Outpatient Pharmacy: Warfarin 5 mg × 12 doses $12.57
     Enoxaparin 30 mg × 24 doses $422.82
   - Inpatient Laboratory: Prothrombin Time $25.57
     Partial Thromboplastin Time $47.53
     Complete Blood Count, including Platelets $43.89
3. Hospital C.
   - Inpatient Pharmacy: Warfarin 5 mg $1.44
     Enoxaparin 30 mg $30.91
   - Outpatient Pharmacy: Warfarin 5 mg × 12 doses $9.12
     Enoxaparin 30 mg × 24 doses $321.60
   - Inpatient Laboratory: Prothrombin Time $44.26
     Partial Thromboplastin Time $48.69
     Complete Blood Count, including Platelets $39.82
4. Outpatient Laboratory A.
   - Prothrombin Time $16.00
   - Partial Thromboplastin Time $20.00
   - Complete Blood Count, including Platelets $15.00
5. Outpatient Laboratory B.
   - Prothrombin Time $26.25
   - Partial Thromboplastin Time $47.00
   - Complete Blood Count, including Platelets $46.25
6. Outpatient Laboratory C.
   - Prothrombin Time $27.25
   - Partial Thromboplastin Time $36.00
   - Complete Blood Count, including Platelets $27.50
7. Home Health Agency A.
   - Skilled nursing visit and blood drawing $105.00
8. Home Health Agency B.
   - Skilled nursing visit and blood drawing $98.00
9. Home Health Agency C.
   - Skilled nursing visit and blood drawing $90.00

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- Jewish Hospital: Inpatient/Outpatient Pharmacies, and Inpatient Laboratory
- Norton Hospital: Inpatient/Outpatient Pharmacies, and Inpatient Laboratory
- Univ of Louisville Hospital: Inpatient/Outpatient Pharmacies, and Inpatient Laboratory
- Medical Towers Laboratory
- Laboratory Corporation of America
- SmithKline Beecham Clinical Laboratories
- Caretenders — Home Health Services
- Visiting Nurse Association — Home Care Services
- Olsten Kimberly Quality Care — Home Health Agency

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References

1. Silver D. An overview of venous thromboembolism prophylaxis. *Am J Surg.* 1991;161(4):537-540.
2. Clagett GP, Anderson FA, Levine MN, Salzman EW, Wheeler HB. Prevention of venous thromboembolism. *Chest.* 1992;102 (Suppl 4):391S–407S.
3. Bergqvist D, Matzsch T. Cost/benefit aspects on thromboprophylaxis. *Haemostasis.* 1993;23(Suppl 1):15-19.
4. Lieberman JR, Geerts WH. Prevention of venous thromboembolism after total hip and knee arthroplasty. *J Bone Joint Surg.* 1994;76(8):1239-1250.
5. D'Ambrosia R, Sculco TP. New perspectives in the prevention of venous thromboembolic disease: Clinical and economic factors. Establishing a universal protocol for deep vein thrombosis following orthopedic surgery: Total knee arthroplasty. *Orthopedics.* 1996;19(Suppl):6-8.
6. Menzin J, Colditz GA, Regan MM, Richner RE, Oster G. Cost-effectiveness of enoxaparin vs low-dose warfarin in the prevention of deep-vein thrombosis after total hip replacement surgery. *Arch Intern Med.* 1995;155(7):757-764.
7. Bergqvist D. Cost-effectiveness of venous thromboembolism prophylaxis in surgery. *Eur J Surg.* 1994;(Suppl)571:49-53.
8. Salzman EW, Davies GC. Prophylaxis of venous thromboembolism: Analysis of cost-effectiveness. *Ann Surg.* 1980;191 (2):207-218.
9. Bergqvist D, Matzsch T, Jendteg S, Lindgren B, Persson U. The cost-effectiveness of prevention of post-operative thromboembolism. *Acta Chir Scand Suppl.* 1990;556:36-41.
10. Oster G, Tuden RL, Colditz GA. A cost-effectiveness analysis of prophylaxis against deep-vein thrombosis in major orthopedic surgery. *JAMA.* 1987;257(2):203-208.
11. Anderson DR, O'Brien BJ, Levine MN, et al. Efficacy and cost of low-molecular-weight heparin compared with standard heparin for the prevention of deep vein thrombosis after total hip arthroplasty. *Ann Intern Med.* 1993;119(11):1105-1112.

12. Paiement GD, Wessinger SJ, Harris WH. Cost-effectiveness of prophylaxis in total hip replacement. *Am J Surg.* 1991;161 (4):519-524.
13. Bakst A. Pharmacoeconomics and the formulary decision-making process. *Hosp Formul.* 1995;42-50.
14. Leclerc JR, Geerts WH, Desjardins L, et al. Prevention of deep vein thrombosis after major knee surgery — A randomized, double-blind trial comparing a low molecular weight heparin fragment (enoxaparin) to placebo. *Thromb Haemost.* 1992;67(4):417-423.
15. Levine MN, Hirsh J, Gent M, et al. Prevention of deep vein thrombosis after elective hip surgery. A randomized trial comparing low molecular weight heparin with standard unfractionated heparin. *Ann Intern Med.* 1991;114(7):545-551.
16. Turpie AG, Levine MN, Hirsh J, et al. A randomized controlled trial of a low-molecular weight heparin (enoxaparin) to prevent deep-vein thrombosis in patients undergoing elective hip surgery. *N Engl J Med.* 1986;315(15):925-929.
17. Amstutz HC, Friscia DA, Dorey F, Carney BT. Warfarin prophylaxis to prevent mortality from pulmonary embolism after total hip replacement. *J Bone Joint Surg.* 1989;71(3):321-326.
18. Harris WH, Salzman EW, Athanasoulis C, Waltman AC, Baum S, DeSanctis RW. Comparison of warfarin, low-molecular-weight dextran, aspirin, and subcutaneous heparin in prevention of venous thromboembolism following total hip replacement. *J Bone Joint Surg.* 1974;56(8):1552-1562.
19. Hull R, Raskob G, Pineo G, et al. A comparison of subcutaneous low-molecular-weight heparin with warfarin sodium for prophylaxis against deep-vein thrombosis after hip or knee implantation. *N Engl J Med.* 1993;329:1370-1376.
20. O'Brien BJ, Anderson DR, Goeree R. Cost-effectiveness of enoxaparin versus warfarin prophylaxis against deep-vein thrombosis after total hip replacement. *Can Med Assoc J.* 1994;150(7):1083-1090.
21. D'Ambrosia R, Colwell CW, Anderson FA, Brox T, et al. New perspectives in the prevention of venous thromboembolic disease: Clinical and economic factors. Question-and-answer session. *Orthopedics.* 1996;19(Suppl):24-25.
22. Carter CA, Brookfield RB. Outpatient thromboembolic prophylaxis following orthopedic surgery: Treatment guidelines and economic analysis. *Manag Care Med.* 1996;May–June:22-27.
23. Colwell CW, Spiro TE, Trowbridge AA, et al. Use of enoxaparin, a low-molecular-weight heparin, and unfractionated heparin for the prevention of deep venous thrombosis after elective hip replacement. *J Bone Joint Surg.* 1994;76(1):3-14.
24. Spiro TE, Johnson GJ, Christie MJ, et al. Efficacy and safety of enoxaparin to prevent deep venous thrombosis after hip replacement surgery. *Ann Intern Med.* 1994;121(2):81-89.
25. D'Ambrosia R, Fitzgerald RH. New perspectives in the prevention of venous thromboembolic disease: Clinical and economic factors. Post-discharge prevention of deep vein thrombosis following total joint replacement. *Orthopedics.* 1996;19(Suppl):15-18.
26. Paiement GD, Bell D, Wessinger SJ, Harris WH. The Otto Aufranc Award Paper. New advances in the prevention, diagnosis, and cost effectiveness of venous thromboembolic disease in patients with total hip replacement. *Hip.* 1987;94-119.
27. *Physicians Desk Reference.* 50th ed. Medical Economics Company. 1996:2020-2022.
28. Prager LO. Doctor-driven utilization controls. *Ann Med News.* 1996;39(40):23.

The Problem With Assumptions

"What the data support is the overwhelming power of the doctor-patient relationship, an inherently non-economic relationship, which creates and nurtures everything that supports and underpins the delivery of health care in this country."

I recently encountered an essay which quoted the philosopher Karl Popper and discussed what he described as "pre-scientific" thinking. In its most simplistic construct, this type of thought involves beginning with a conclusion and then commencing a search for data, which supports that preconceived perspective. The essay strongly argued the fact that too much of our current public discourse involves just this type of thinking. While the examples cited therein were largely geopolitical, much the same argument can be made about the current quality of discussion in the health care arena.

When we listen to claims that health care costs are rising beyond acceptable percentages of GNP and beyond control, an argument is being made that there is a finite demand and supply for health care services. If one begins with this argument, it becomes easier to understand how the argument for capitation, restricted access, and frank rationing of services can be made. One can simply blame excessive provider costs, unfettered pharmaceutical profits, insurance company rapacity, and medical-legal constraints for the excessive costs of care. Yet, if the data are fairly analyzed, the removal of the aforementioned sources of blame only temporarily impacts the overall cost of health care in this country. What the data support is medicine's seemingly limitless capacity to create and implement new and effective medical technology and our society's equally apparent demand for its benefits.

In the political arena, medicine as a profession has frequently spent significant human, political, and economic capital in the defense of specific formulas for physician compensation. The debate pivoted on the conclusion that physicians deserved certain reimbursement levels by virtue of their lengthy education, malpractice exposure, burdensome overhead, and clinical judgement. It became easy for our opponents to counter these arguments by pinpointing the taxpayer subsidization of a large amount of medical education, the relative lack of data supporting much of medical decision-making, the relative levels of physician salaries, and the ability of non-physician providers to fulfill some aspects of the physician's purportedly exclusive role. What the data support is the overwhelming power of the doctor-patient relationship, an inherently non-economic relationship, which creates and nurtures everything that supports and underpins the delivery of health care in this country. When physicans have couched their arguments for or against certain reimbursement policies in the context of its impact on the patient and enlisted patient support for that position ("drive through deliveries," for example), the economic impact to physicians has often been favorable and the impact on patient care has been positive.

In medical education, there has been a long-standing desire to allocate medical specialty training slots to coincide with projected manpower needs. The argument assumes a static delivery system, immutable spectrum of disease, and a limited capacity for physician training. Then we encounter

"What the data support is medicine's seemingly limitless capacity to create and implement new and effective medical technology and our society's equally apparent demand for its benefits."

a system of health care which becomes more and more successfully regionalized and technologically integrated, life expectancy lengthens and HIV disease appears along with an attendant demand for geriatricians and infectious disease specialists, and specialty-trained physicians successfully incorporate new practice techniques and/or retrain in response to technological developments and market pressures. What the data support is the need to select and train the best and brightest candidates possible to confront a turbulent and changing medical future.

As medical students we were challenged to learn to take a history in detail and perform a meticulous physical exam. As residents we developed the capacity to take that database and apply it to patient management. As practitioners we strive to hone the diagnostic elegance and therapeutic acumen required of us to appropriately care for our patients. None of these endeavors involves "pre-scientific" thinking. They require our open minds and hearts to see what is before us and to do what we conclude to be of most benefit to our patients. To the matters confronting our profession today, we should and must apply the same.

Daniel W. Varga, MD

State of the State Alliance

The story I began telling you, when I stood before you almost a year ago at my installation as 73rd President of Kentucky Medical Association Alliance, has grown. It includes what we do at Kentucky Medical Association Alliance. We are caring physicians' spouses who are proactive voices of the Kentucky Medical Association in the community.

This year's story is of a visionary approach for the Focus '97-'98, where we integrated Health Promotion-SAVE, Legislation, and AMA-ERF into a membership development tool.

Focus '97-'98 SAVE is a joint campaign to stomp out violence from our communities since 1995 when Kentucky Medical Alliance joined American Medical Association Alliance. The project SAVE is an acronym for **S**top **A**merica's **V**iolence **E**verywhere. With the help of many generous contributors and supporters—

- Kentucky Medical Association, Public Education Committee
- Kentucky Cabinet for Health Services, Department for Public Health, Frankfort
- Trover Foundation
- Family Advocacy Center — Hopkins County, Health Department
- Pike County Domestic Violence Board
- Southern Medical Association Auxiliary, Health Education
- Donation to Honor State Kentucky PTA Volunteers Where Children Come First
- Perry County
- Donation to Honor KMA Alliance Volunteers Working in Coalition with Organization for Quality Health Care of Children & Families Across the Commonwealth
- AMA Alliance by giving a discount
- All Organized County Alliances

thousands of dollars were raised, a substantial discount was given by American Medical Association Alliance, and a one time large order for the project was placed.

The project provided 80,000 each of "I Can Choose" Booklets and "Hands Are Not For Hitting" Place Mats which were distributed to kindergarten through 3rd grades in the public schools for all organized and some unorganized counties in the state. These two publications are aimed at teaching children conflict resolution skills without resorting to violence.

In the month of March, the Medical Alliance Month/Doctor's Day Month, the above publications were in the hands of children with the help of Alliance members, school health nurses, health coordinators, counselors, teachers, and parents. Three hundred and seventeen public schools in the following counties with K-3 children have received the publications:

Daviess	McCraken
Jefferson	Webster
Perry	Trigg
Caldwell	Christian
Hopkins	McLean
Fayette	Harrison
Pulaski	Muhlenberg
Crittenden	Madison
Henderson	Calloway
Boyd	Ohio
Northern Kentucky	Pike
Todd	Union
Warren	Franklin

Kentucky Medical Association Alliance is represented on the following:

1. Governor's Advisory Council, Kentucky Incentive Project on Substance Abuse Prevention
2. Kentucky Action Executive Committee
3. Kentucky Coalition of School Health
4. Kentucky Association of School Health

Aroona Dave

We were able to organize Madison County Medical Society Alliance and all the members are excited about having SAVE Program in their county schools.

Madison County Medical Society Alliance has invited their prospective members to their membership drive. The counties that have potential to be organized have dues-paying members as their contact people.

Our story was told to the prospective members through our new Membership Brochure. Hundreds of them learned accurately what we do at the Alliance. President of Resident Physicians' Spouse Group was able to attend the AMA Alliance's Leadership Confluence at Drake, Chicago, along with eight county Presidents-Elect.

Our story resounded the Commonwealth of Kentucky, when upon our request, Governor Paul

Patton signed a proclamation declaring October 8th, 1997 SAVE Today day. Our legislative Vice-President, Angie DeWeese, was with almost 60 Alliance Members able to attend "A Day At The Capitol" — a legislative session sponsored by Kentucky Medical Association. A legislation requiring addition of language in marriage license dealing with reduction of domestic violence was introduced in the General Assembly. An Anti-Tobacco Resolution shall be introduced in the Kentucky Medical Association Alliance, House of Delegates.

Many members across the state made membership a major issue and as a result of this effort, we hope to reach our goal. American Medical Association Educational Research Foundation was efficiently put before all concerned by our President-Elect Nominee, Carolyn Daley, and we have a successful story to tell you.

Past years' achievements are the sum of caring, courage, hard work, and cooperation. I commend our Board Members, County President/Presidents-Elect who have shown unusual juggling skills in being able to balance family/social commitments and being volunteers for Kentucky Medical Association Alliance.

We will be concluding the past years' story at the 75th celebration at the Annual Convention, Madisonville, Kentucky, on April 20-22, 1998. Capturing one's hopes and vision and turning it into the reality is what all the members across the state have done this year through all the projects/ programs and public relations in the community. Seminar on Media Violence by nationally known speaker, Dr David Walsh, will be open to area health coordinators, school health nurses, and health providers.

As we leave the legacy of 75 years of excellence for the future leaders, the story of the past year will continue when following officers for 1998-99 are installed by American Medical Association Alliance's Secretary Ann Hansen:

Jan Crase (Mrs James), President
Carolyn Daley (Mrs G.I.), President-Elect
Kathy Cavanaugh (Mrs Kevin), Vice President, Membership Development
Angie DeWeese (Mrs Bob), Vice President, Legislative Affairs
Vicky Borders (Mrs Jack), Vice President, AMA-ERF
Audrey Carter (Mrs Keith), Vice President, Health Promotion
Nancy Bunnell (Mrs Thomas), Secretary, Promotion
Kaye Florence (Mrs Joseph), Treasurer

I recommit my support and cooperation to our future leaders and the future of this organization. As we have told our story to the organizations with whom we have worked in coalition this year, the circle of possibilities has been widened.

With eternal hope, deep understanding, and proactive attitude, I can say that we are on our way to the next millennium. We are fortunate to have the cooperative and supportive staff and leadership at our parent organization, the American Medical Association Alliance. Our special relationship with Southern Medical Association is most valued.

I would like to give my heartfelt thanks to the members of the Staff of the Kentucky Medical Association, my second family, as I come to the close of my term. They have demonstrated efficiency, understanding, and professionalism. I could not have done it without the encouragement, understanding, and support of my dearest Uday, Nish, Manisha, and Christopher, and my entire medical family.

As I have traveled through the State at county Alliance meetings, I have been overwhelmed by the love, support, and warmth from everyone.

I would be remiss if I did not mention those who came before me for their 'CARING'! My best.

Fondly,

Aroona Dave, President
Kentucky Medical Association Alliance
1997-98

A Real Doctor

I am often approached by medical, legal, and other groups to give public addresses regarding my and my colleagues' practice of forensic pathology, for a certain fascination with all things forensic has been with our society for a long time. Given the high profile nature of many recent murder trials, it should not strike the reader as surprising that everyone from medical associations to bar associations to the Rotary Club wants to have a speaker wax eloquently over a lunch meeting on medical examiner work. Such popular interest is not without precedent; even at the turn of this century, Americans were fascinated, as now, with courtroom procedure and the role of scientific evidence in the prosecution of criminal cases.

We forensic pathologists are, I must declare, an oft-misunderstood lot, not only by the public, but also by our own medical colleagues. Many times I have been called by a high school or college student wanting to know if the course of study to become a medical examiner is one or two years. The disappointment he or she registers is palpable when I reply that after four years of college, four years of medical school, five years of residency training in anatomic and clinical pathology, and a year of fellowship in forensic pathology, one then assumes the sobriquet of medical examiner. The fire and enthusiasm in the young man or woman's voice on the other end of the line often deflates quickly, and hasty good-byes are muttered.

As noted above, many colleagues are not quite sure of what we do either. My two brothers, an obstetrician and pediatric ophthalmologist, are wont to ask, "Well, you know he was shot; why do you have to do an autopsy?" I patiently explain to them, as I have to civic groups as well as agencies in charge of funding the various medical examiner programs with which I have been associated, that the cause of death is only a small part of the postmortem examination, a procedure encompassing everything from scene investigation to autopsy and beyond, with collation of investigative and medical data in an attempt to not only explain the cause of death, but also the manner of death (natural, accident, suicide, homicide), mechanisms of death, and circumstances surrounding death. Often, procurement of evidence, such as a firearm projectile or fingernail scrapings, can be the linchpin of the successful prosecution of a murder. I'm fond of telling legislators that since a murder trial can cost over $1,000,000 to stage,[1] it behooves the medical examiner's office to have available adequate resources. It is a battle that many medical examiner programs fight continuously, for death is not a favorite topic of discussion in many political offices, and as one member of congress told me years ago, "Dead people don't vote." My immediate retort: "Their relatives *do*, however." It is an argument that sometimes is accepted, sometimes not. We are fortunate in Kentucky to have the stewardship of the Division of Medical Examiner Services in capable hands, hands which articulately procure for the Commonwealth the necessary resources for performing our necessary duties.

On an early Autumn Saturday, one of those clear, bright days in which the beauty of the Bluegrass is enough to bring a tear to the eye, I had three cases to perform from various parts of Central and Eastern Kentucky, our office's bailiwick. The three were quite representative of the caseload with which we deal. The first examination of the day was an accidental death, a young teenager who was driving home drunk from a Friday night party and lost control of his automobile, killing himself and severely injuring another. The second was a victim of homicide, a middle-aged woman whose partner beat her with a blunt object. The third was a suicide, a young woman, distraught over recent losses, who shot herself in the chest. All in all, it was not an unusual day for our office in Frankfort, where we perform approximately 800 postmortem examinations per year.

I have often proclaimed, to the consternation of some and the delight of others, that were it not for drunk driving and easy access to firearms, our caseload would be half its current level. Put another way by my Vermont friend, author Archer Mayor, originator of the Joe Gunther mystery series, "All your work comes down to the 'Four L's': Liquor, Loot, Lunacy and Lust." Well put, it is an aphorism which is as easily applied to policework, emergency departments, and trauma surgery, all sister professions which have much common ground with forensic pathology.

I love my profession, a claim which may seem morbid to some, but I must profess that while a certain intellectual pleasure is gained from performing a good dissection, it is the autopsy as springboard that interests me most; that is, it is what we do with the autopsy that matters. We gather data regarding those things that cause morbidity and mortality for Kentuckians, we procure evidence for court, we teach, we contribute to health research; in other words, we are physicians dedicated to the public's health. I used to bristle when one of my brothers or colleagues would say, "Why don't you want to be a 'real' doctor."[2,3] Happy with my choice, I now laugh, knowing that while the patients I directly serve are deceased, I also serve a broad constituency of relatives of the deceased, medical professionals, legal professionals, organ procurement agencies, and others. I routinely speak with more numbers and a wider variety of individuals than I did when I was a clinical physician, and I often find myself in a unique position to offer that most precious of gifts that any physician, any human being, can give: peace of mind. Peace of mind, whether it comes from telling the mother of an

infant dead of Sudden Infant Death Syndrome that there was nothing she did or didn't do that could have changed things, to telling the relative of a murder victim that, given my examination of the deceased, I can say with certainty that he or she did not suffer. The look of palpable relief on the faces of these loved ones is a sight to behold, and such interactions can often be a reaffirmation of our basic reasons for desiring to become physicians in the first place.

We are but cogs, albeit important ones, in the machinery of the investigation of sudden, unexpected, and violent death which befalls citizens of our Commonwealth. As is true of any specialty in medicine, however, it is not being part of any machinery that offers the truest joy in one's profession, rather, it is the personal communication: whether with families of the deceased, fellow medical colleagues, law enforcement officials, attorneys (be they prosecution or defense), organ procurement officials, or any other interested party, it is through this human connection that I feel my truest fulfillment as a physician, or, in the words of my two brothers, as "a real doctor."

Gregory J. Davis, MD
Department of Pathology and Laboratory Medicine
University of Kentucky College of Medicine
Office of the Associate Chief Medical Examiner
Commonwealth of Kentucky
100 Sower Boulevard, Suite 202
Frankfort, KY 40601-8272
phone: 502-564-4545
fax: 502-564-1699
Email: gjdavis@pop.uky.edu

References

1. Personal communication, Thomas R. Keith, District Attorney, 21st Prosecutorial District, State of North Carolina.
2. Inoshita T. The education of a pathologist. *Ann Intern Med.* 1992;117:608.
3. Davis GJ, Lantz PE. Pathologists are doctors. *Ann Intern Med.* 1993;118:575.

WHEN SMOKERS QUIT

Within 20 minutes of smoking that last cigarette, the body begins a series of changes that continues for years.

20 MINUTES
- Blood pressure drops to normal
- Pulse rate drops to normal
- Body temperature of hands and feet increases to normal

8 HOURS
- Carbon monoxide level in blood drops to normal
- Oxygen level in blood increases to normal

24 HOURS
- Chance of heart attack decreases

48 HOURS
- Nerve endings start regrowing
- Ability to smell and taste is enhanced

2 WEEKS to 3 MONTHS
- Circulation improves
- Walking becomes easier
- Lung function increases up to 30 percent

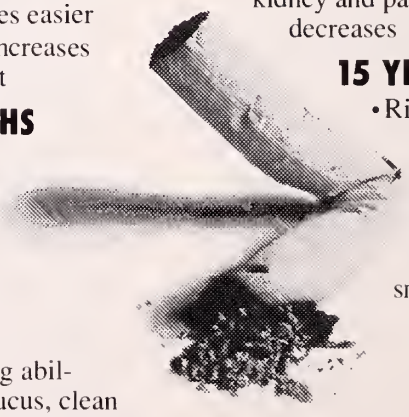
1 to 9 MONTHS
- Coughing, sinus congestion, fatigue, shortness of breath decrease
- Cilia regrow in lungs, increasing ability to handle mucus, clean the lungs, reduce infection
- Body's overall energy increases

1 YEAR
- Excess risk of coronary heart disease is half that of a smoker

5 YEARS
- Lung cancer death rate for average former smoker (one pack a day) decreases by almost half
- Stroke risk is reduced to that of a nonsmoker 5-15 years after quitting
- Risk of cancer of the mouth, throat and esophagus is half that of a smoker's

10 YEARS
- Lung cancer death rate similar to that of nonsmokers
- Precancerous cells are replaced
- Risk of cancer of the mouth, throat, esophagus, bladder, kidney and pancreas decreases

15 YEARS
- Risk of coronary heart disease is that of a nonsmoker



Source: American Cancer Society; Centers for Disease Control and Prevention

Sutton's Law

Jane M. Orient, MD, and Linda J. Wright

Hacienda Publishing, Inc
PO Box 13648
Macon, GA 31208-3648
1997; 299 pp, $21.95

Reviewing a novel instead of non-fiction changes the pace, if not the importance of the message. Mixing medicine, murder, morality and money, not only the m's come in staccato, but also the story races through this small book with fury.

EquaCare as the corporate entity becomes the malefactor, while the heroine in white smock works through her internship with bodies falling in front of her. Her science reads through the charted data, failing to equate the numbers with the outcome. While the DRG profiles and cost effectiveness reports documented the good and bad economic doctors, other physicians took turns at abetting the plot, or trying to uncover what was wrong. Mix in some interpersonal gamesmanship and a few intimacies for the sex interest, the reader lives the words coming out with anticipation.

The subliminal, but all too obvious message is that managed care is potentially nefarious, and that today's fiction is tomorrow's reality.

With mystery and plentiful intrigue, this novel would stand on its own for some reading evening, but the messenger screams that there is a higher meaning.

Medical Warrior: Fighting Corporate Socialized Medicine

Miguel A. Faria, Jr, MD

Hacienda Publishing
PO Box 13648
Macon, GA 31208-3648
1st edition, 209 pp, $23.95

Packed into this small book, five parts use an historical and political perspective to examine modern medicine. Really a series of essays, this information boils out of Dr Faria's passionate effort to explain the current predicaments and travails for the physician in practice. His aim is for the heart of the doctor as well as the brain. Past cultures, from the Greek and Roman days, to the more recent industrial age, can compare to the assaults on medicine now. If deteriorating medical ethics, placing the corporate welfare ahead of the patient's well being predominates, then medicine will evolve from a benevolent, humane occupation, to a robotic builder of economic powerhouses.

Reflecting the criticism that those who emasculate government and its programs are self centered, Dr Faria answers that government corrupts the doctor patient relationship and flourishes by expanding control over the people. That we the people do not know what is good for us and need protection from medical practitioners makes this book reading a necessity, if this misconception perpetuates itself.

Each part of the book, starting with "Lessons from History," "Medical Ecology," "Towards Collectivism in Medicine," "The Role of Public Health," and "Managed Care, Corporate Socialized Medicine and Medical Ethics" explains this decay, suggesting that political immorality and soft moral fiber catalyze this reaction.

Those in private practice medicine and their present and future patients may read this book to stimulate, exacerbate, and finally construct an approach to fighting their enemies. A bibliography, although brief and selective, continues the reader's indoctrination. With an index busy in names and references, this work may also be handy for future work.

Stephen Z. Smith, MD
Book Review Author

PEOPLE

Kenneth S. DeSimone, MD, a Greensburg surgeon, received the first annual Norton Hospital Outreach Physician Award during the Annual Adult Services Symposium.

The award recognizes Dr DeSimone's selfless practice of medicine, meritorious service to the community, consistent advocacy for outstanding quality patient care and dedication, and support of the ongoing medical education process.

John S. Spratt, MD, University of Louisville professor of surgery and health systems, is a retired captain in the Naval Reserve and a clinical professor of surgery at the Uniformed Services University. Dr Spratt recently attended the 52nd Annual Meeting of the Armed Forces' Society of Medical Consultants at Uniformed Services University. The society was founded after World War II to support the maintenance of high quality in military medicine.

UPDATES

Health Kentucky, Inc Receives National Award

Health Kentucky, Inc received the sixth annual Monroe E. Trout Premier Cares Award on February 5, 1998, during Premier's annual Governance Education Conference in Orlando, Florida. The award, which carries a $50,000 cash prize, recognizes an exemplary effort that has made health services accessible to the medically under served.

J. Scott Judy, executive vice president of Health Kentucky, said, "This national recognition is for all the generous health care providers involved in the Kentucky Physicians Care network. They are on the front lines, assuring that needy Kentuckians receive health care. We're glad they are receiving some deserved national recognition."

Health Kentucky, Inc is a non-profit, educational and charitable organization designed to help needy Kentuckians obtain access to quality health care. Formed in 1984 as the Kentucky Health Care Access Foundation, Health Kentucky, Inc currently sponsors the Kentucky Physicians Care network (KPC). This statewide "safety net" of care provides no cost health care services to uninsured Kentuckians with incomes below the federal poverty level. Originally offering hospital and physician services, the network consisting of volunteer health care providers has been expanded to include dental, pharmaceutical, home health, and hospice care at no charge to eligible participants. All components of the network are endorsed and co-sponsored by the respective state trade or professional association.

KPC has provided an estimated 300,000 patient and physician contacts estimated at $3.7 million. The total estimate for the physician, dental, and pharmaceutical services donated since 1985 is $5.1 million. In fact, KPC has been so successful that at least three other states, including South Carolina, Georgia, and Arkansas have replicated "Kentucky's model" statewide, while 45 other projects in 26 states have used the model.

Governor Paul E. Patton complimented the work of the organization by saying. "The Commonwealth of Kentucky is very fortunate and grateful for Health Kentucky's commitment to provide health care access to this state's medically under served. Through its 12 years of service, this noble task has been successful in improving the lives of indigent Kentuckians."

The Monroe E. Trout Premier Cares Award is sponsored by Premier, the largest health care alliance enterprise in the United States, with more than 240 owner systems that own or operate some 700 institutions and have affiliations with another 1,000 hospitals. This national award is named in honor of Monroe E. Trout, MD, retired chairman and chief executive officer of American Healthcare Systems, which in 1996 merged with Premier Health Alliance and The Sun Health Alliance to form Premier.

Donald C. Barton, MD, a family physician in Corbin, Kentucky, and president of Health Kentucky, spoke about the KPC program. "To our knowledge no one who has applied and qualified for the program has ever been denied care," he said. "In 12 years of service, that is a remarkable accomplishment."

Those who are uninsured, in need of health care, and do not qualify for Medicaid or Medicare may call 1-800-633-8100 to obtain information about being certified eligible for the Kentucky Physicians Care Program.

3-D Glasses Help Surgeons Look Inside the Body

Virtual reality is all the rage in some game centers. The 3-D glasses similar to those associated with the games now allow surgeons to operate inside the body without opening up the patient's chest.

University of Louisville heart surgeon **Laman A. Gray, MD,** uses the glasses in some heart valve-replacement surgeries. The glasses are connected to tiny cameras and lights, which are inserted to the site of the surgery through small incisions. Dr Gray says the images projected into the glasses are far superior to those projected onto a screen, which has been the common medium for such procedures.

The glasses allow doctors to perform intricate procedures without fully opening the body, dramatically

reducing recovery time and risk of infection, he says.

Plastic Screws Eliminate Need for Second Surgeries

Orthopedic surgeons commonly use metal screws to hold together broken bones. University of Louisville faculty now are using plastic screws that offer several benefits — including eliminating the need for a second surgery to remove the screws.

The University reports that unless removed, the metal screws stay with a patient for life. The plastic screws dissolve and are absorbed into the bloodstream, and bone grows back in the area where the screws had been placed.

Orthopedist **David Seligson, MD,** says since the plastic screws are gone, the chance for late infection is reduced, a factor of particular benefit to patients suffering from immune system problems.

Pap Smears Still May be Best for Finding Cervical Cancer

Two new tests may help spot cervical cancer that otherwise might be missed. But the initial Pap smear still is the best way to test for the disease, says a University of Louisville doctor.

Dennis M. O'Connor, MD, says patients can request the two new tests, PAPNET and ThinPrep. Both methods are effective and probably a good idea for patients at risk for cervical cancer, such as young, sexually active women who have infrequent check-ups. However, women who aren't considered at high risk and who see their doctor regularly probably don't need the additional tests, he says, and a recent study of military women and dependents, published in the *Journal of the American Medical Association,* confirmed that opinion, finding PAPNET offered little benefit to the women, who tend to be screened yearly.

Ironically, the women who would benefit most from the rescreening tests probably are least likely to request them. That may change once insurance companies start to cover the tests, Dr O'Connor said.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Barren

Victor L Zirilli MD — R
PO Box 1537, Glasgow, 42142
1981, U of Texas, Galveston

Boyle

Peter F Ballard MD — OTO
516 Popplewell Rd, Danville, 40422-9405
1977, U of Kentucky

Christian

Ruxandra M D Mares MD — P
PO Box 2200, Hopkinsville, 42241
1971, U of Bucharest

Fulton

Thomas J McDonald MD — OBG
2002 Holiday Lane Ste 200, Fulton, 42041
1997, Texas Col of Osteopathic Med

Hopkins

Roderick H MacGregor MD — FP
200 Clinic Dr, Madisonville, 42431
1973, Dalhouse U, Canada

Jefferson

Nancy Kubiak MD — IM
1603 Greensbrook Pl, Louisville, 40245
1991, Baylor Col of Med

Robert William Sweetman MD — PD
723 Winding Oaks Trl, Louisville, 40223
1988, U of Health Science, N Chicago

Kenton

Jordan C Hsu MD — PD
2865 Chancellor Dr Ste 225, Crestview Hills, 41017
1993, Duke

Knox

Charles V Stargel MD — FP
PO Box 1150, Barbourville, 40906
1990, George Washington U

Madison

Julia Ellen Richerson MD — PD
210 Layne Ct Apt C3, Berea, 40403
1993, U of Kentucky

Perry

Rizwan Ali MD — P
PO Box 7191, Hazard, 41701
1989, Dow, Pakistan

Pulaski

John C Rodrigues MD — PUD
118C Tradepark Dr, Somerset, 42503-3427
1982, Topiwala National, India

Rowan

Christian F Weigel MD — IM
234 Medical Cir, Morehead, 40351-1191
1981, St Louis U

Whitley

Glenn M Uber DO — FP
80 Woods Point, Corbin, 40701
1991, Kirksville Col of Osteopathy

In Training

Boone

Allana J Lee DO — FP

Hopkins

Jeffery Barber DO — FP
Jeffrey Baxter MD — FP
Joseph L Charlot MD — FP

John Joseph Farmer MD — FP
Tate A Grimes MD — FP
Timothy Richard Long MD — FP
M Steven Payne MD — FP
Jonathan Privett MD — FP
George F Rovito MD — FP
Christopher Sims MD — FP

Jefferson

Fernando M Akerman MD — OBG

Kenton

Carrie Ann Lutz MD — FP

DEATHS

Richard L. Roth, MD
Louisville
1926-1998

Richard L. Roth, MD, a retired neurologist, died February 16, 1998. Dr Roth was a 1952 graduate of the University of Louisville School of Medicine and a life member of KMA.

MARK YOUR CALENDAR!

Western Regional Meeting

Trustee Districts 1, 2 , 3, 4 & 6

Wednesday, April 22, 1998

RiverPark Center
Owensboro, KY

Earn 3 Hours CME Credit
Dinner and Program

KMA Annual Meeting
Sept 21-23 • Hyatt Regency Commonwealth Convention Center • Louisville, KY

Impaired Physicians Program
9000 Wessex Place, Suite 305
Louisville, KY 40222
Phone: 502/425-7761; Fax 502/425-6871

AWARDS NOMINATIONS

The KMA Awards Committee is accepting nominations for the two highest awards the Association presents. The Distinguished Service Award is presented annually to a member of the Association based on the following criteria:

- Contributions to organized medicine (including membership in county society, attendance of county and state meetings, service on committees, leadership as an officer, etc.)
- Individual medical service
- Community health, education and civic betterment
- Medical research

The nominee may qualify on any one or all combinations of these points. Reasons for the nominations should be clearly stated.

The Kentucky Medical Association Award is presented to an outstanding lay person in Kentucky each year in honor of his or her outstanding accomplishments in the field of public health and/or medical care.

The Awards Committee will have the responsibility to choose recipients of the KMA Distinguished Service Award and the Kentucky Medical Association Award. Any county society or individual member may suggest nominees to the committee.

The awards are presented at the President's Luncheon during the annual meeting.

AWARD NOMINATION FORM

Name: _____

Address: _____

Birth Date: _____ Place: _____

Marital Status: _____

Spouse's Name: _____

Children: _____

☐ Distinguished Service Award (Physician)

☐ KMA Award (Lay Person)

Education: _____

Military: _____

Membership in Professional Organizations: _____

Membership in Civic Organizations: _____

Honors and Awards: _____

(Describe nominees qualifications and other pertinent information which the Awards Committee may consider in making its decision.

Name of Person or Group Submitting Nomination: _____

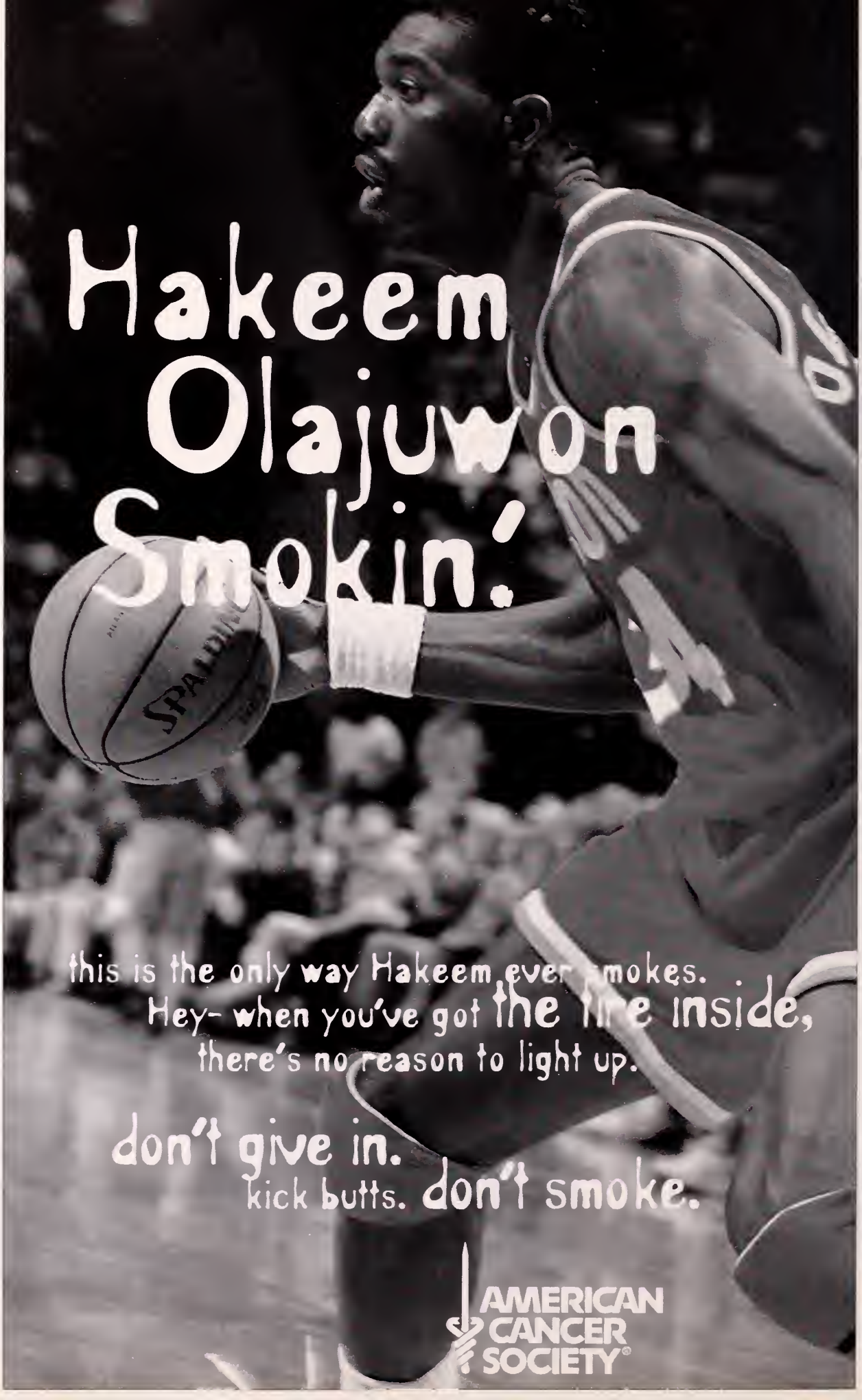
Address: _____

Phone: (Home) _____

(Office) _____

Please fill in and mail to: KMA, Attn: Awards Committee, 4965 US Hwy 42, Ste 2000, Louisville, KY 40222-6301

Deadline for receiving nominations is July 15.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Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates: $40 per insertion ($20 for KMA members) for the first 30 words; 50¢ for each additional word.

Send advance payment with order to: The Journal of KMA, The KMA Building, 4965 US Hwy 42, Suite 2000, Louisville, KY 40222.

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PRN PHYSICIAN — PRN physician needed for busy ambulatory care facility. Must be Board certified or Board eligible in Family Practice. Hours include weekdays and Saturdays as needed. No admissions and no call. Malpractice insurance provided. Send resume to Pattie A. Clay Hospital, Attn: Human Resources, PO Box 1600, Richmond, KY 40476-2603.

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Louisville, KY 40222-6301

502.426.6200; Fax 502.426.6877

APPLICATION FOR SCIENTIFIC EXHIBITS

Kentucky Medical Association
1998 Annual Meeting

Commonwealth Convention Center, Louisville, KY
September 21-23

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

   Address _____

   Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____

   (The draped booth has 4′ side walls. This footage should not be included in backwall footage required). TABLE DESIRED? _____

   (Table 2′ deep x width of backwall (footage) ELECTRICAL OUTLET DESIRED? _____

5. Will summary printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

   _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation and (b) the method, eg, equipment to be used.

Date _____ _____

Signature of Applicant

Fill out and mail to:
RICHARD A. KIELAR, MD, Chairman
Scientific Exhibits Committee
Kentucky Medical Association
4965 US Hwy 42, Ste 2000
Louisville, KY 40222-6301

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 30, 1998.

- **COMMERCIALISM, such as utilizing the name of sponsoring organization or facility, either on the exhibit or in printed materials, is PROHIBITED.**
- **KMA provides, without cost to the exhibitor, one 2 ft. table, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc, may be furnished by the exhibitor or may be rented, if desired, by applying directly to the George E. Fern Company, 3752 Crittenden Dr, Louisville, Kentucky 40209.**
- **Transportation and erection costs are the responsibility of the exhibitor.**
- **Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.**
- **Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.**
- **Exhibit must be dismantled and removed by 8:00 PM, Wednesday, September 23, 1998.**
- **Exhibit space is strictly limited to footage and space allotted. No exhibit may extend into the aisle.**

Commonwealth Convention Center and the Kentucky Medical Association or its agents cannot guarantee against loss or damage and will assume no liability for damages nor guarantee the exhibitor against loss of any kind. The exhibitor agrees, with the Association, to be responsible to the Commonwealth Convention Center for damages that may occur as a result of the exhibitor's use of the facility.

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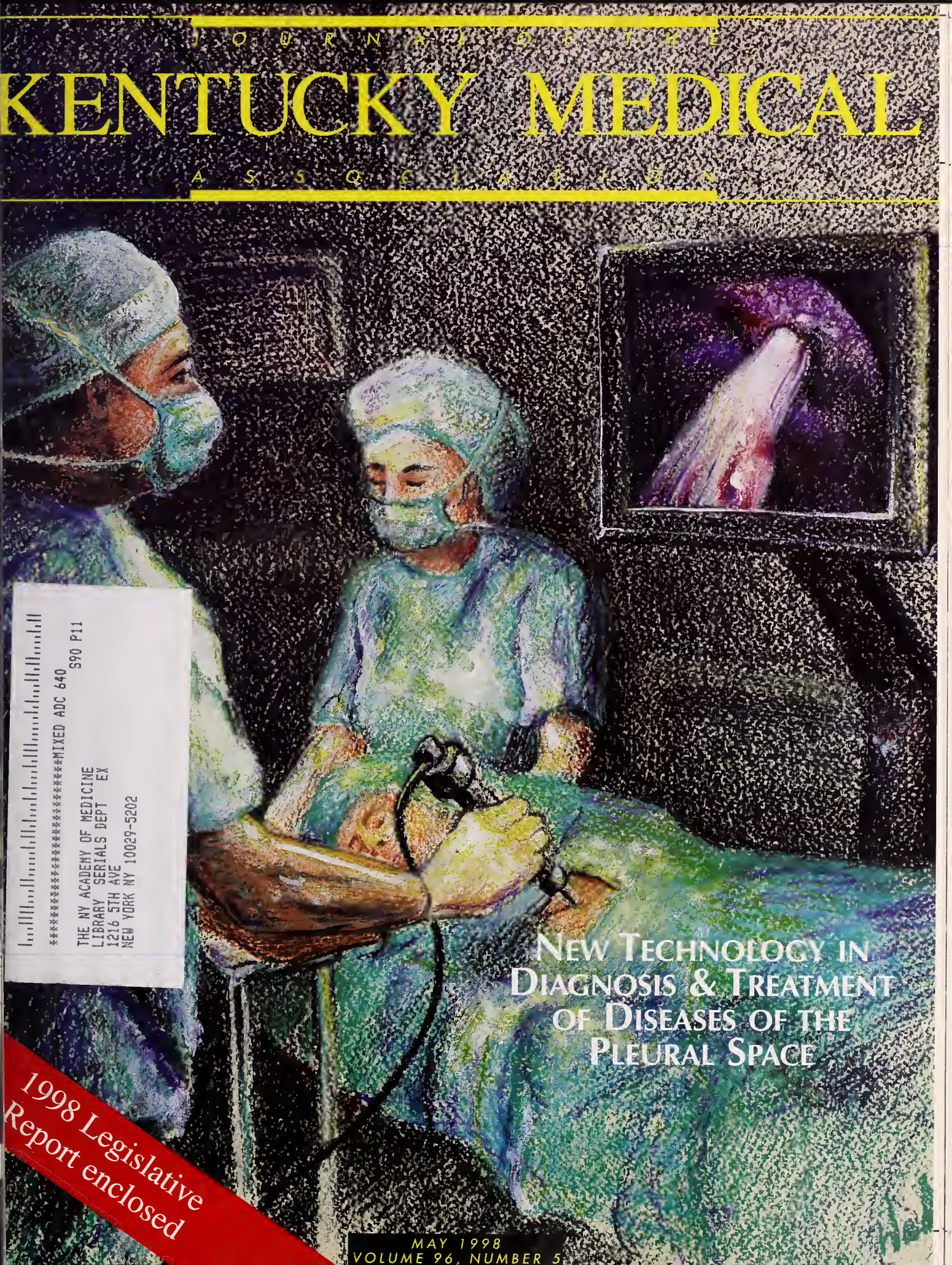
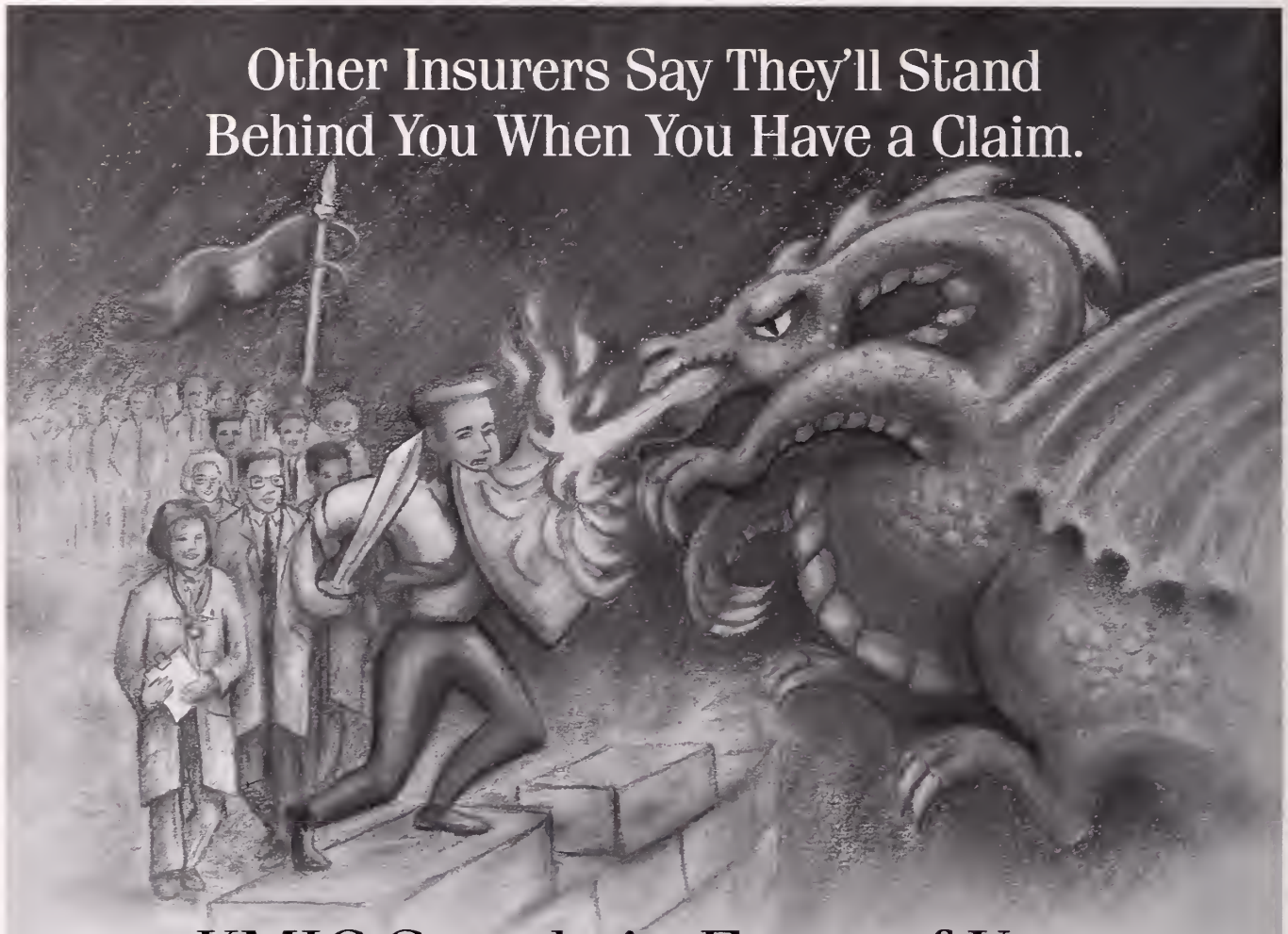


New Technology in Diagnosis & Treatment of Diseases of the Pleural Space

1998 Legislative Report enclosed

MAY 1998
VOLUME 96, NUMBER 5

Other Insurers Say They'll Stand Behind You When You Have a Claim.



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JOURNAL OF THE

KENTUCKY MEDICAL

ASSOCIATION

VOLUME 96, NUMBER 5 MAY 1998

COVER:
Video-assisted tharacascapic surgery (VATS) affers a new method to diagnase and treat many canditians traditianally treated anly by tharacatamy. The authars review the histary af VATS and define its indicatians, benefits, and limitatians as an effective alternative ta tharacic surgery.

Artwork by Lee Wade af Eminence, KY.

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KMA

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THE 1998 KMA LEGISLATIVE REPORT IS FEATURED IN THIS ISSUE — LOOK FOR SPECIAL PULL-OUT SECTION FOLLOWING PAGE 186!

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Feeding the Hand That Bites You

Donald R. Stephens, MD

Approximately 25 years ago, insurers and physicians, concerned with the explosion of non-physician practitioners and recognizing growing demands upon the health delivery systems, recommended that licensure of practitioners be halted. Studies indicated that costs are not reduced by expanding the practitioner base, and in fact give impetus to rising health costs. Subsequently, federal and state governments began prohibiting direct reimbursement to non licensed practitioners. However, certification was encouraged.

Non physician groups countered with a five step incremental legislative approach. Not all groups sought all five steps.

(1) Certification
(2) Licensure with mandatory continuing education
(3) Independent practice
(4) Direct reimbursement
(5) Prescribing privileges

The ability of rabbits to procreate takes a backseat when it comes to health practitioners. Beginning in the late 70s on up through the 1996 Kentucky General Assembly, a host of practitioners lobbied the legislature for recognition or practice expansion including: Athletic Trainers, Audiologists, Chiropractors, Clinical Social Workers, Dieticians, Emergency Medical Technicians, Hearing Aid Specialists, Marriage and Family Counselors, Massage Therapists, Mental Health Counselors, Mid-level Practitioners (yes, there exists such a practitioner in Kentucky law), Lay Midwives, Nutritionists, Nurses including Registered Nurses, Advanced Registered Nurse Practitioners, Nurse Anesthetists, Nurse Assistants, Home Health Nurses, Nurse Midwives, Occupational Therapists, Ophthalmic Dispensers, Opticians, Optometrists, Paramedics, Pharmacists, Pharmacy Assistants, Physician Assistants, Physical Therapists, Podiatrists, Professional Counselors, Psychologists, Respiratory Therapists, School Psychologists, Social Workers, Speech Pathologists, and Radiological Technicians.

"The beat goes on." During the 1998 Session a new group of practitioners sought to join the ever growing throng. New groups included Alternative/Non Conventional Physicians, Acupuncturists, Clinical Exercise Physiologists, Naturopathists, Clinical Nurse Specialists, Oriental Health Practitioners, and Pastoral Counselors. Well established groups including Athletic Trainers, Marriage and Family Counselors, Advanced Registered Nurse Practitioners, Pharmacists, Occupational Therapists, Optometrists, and Physician Assistants aspired to expand or alter their practice acts.

Traditional arguments for establishment or expansion of practitioners was based on physician shortage, enhanced access, and reduced costs. However, increased physician supply, better roads, and modern communications have to a large extent addressed most of these

"We are not opposed to professionalism among non physicians. This discussion is about patient care. Only finite resources are available for medical care. Managed care and increasing administrative costs to keep HMOs and other entities afloat will absorb every single additional health care dollar government and business can gin up."

"The most disturbing element comes from well intentioned physician colleagues. During the 1998 Session, KMA was lobbied by physicians to support practice expansion of several groups."

issues. While physician shortages exist in isolated rural areas and inner cities, over supply of physicians should soon eliminate even these concerns.

In 1994 the Kentucky Nursing Association listed ARNP practice locations "by county." Practice location of ARNPs was then compared to Kentucky counties considered "critical" by the Rural Kentucky Medical Scholarship Fund. In 18 of 28 critical counties there were zero (0) ARNPs practicing in those counties. Only 10 of 252 ARNPs or approximately 4% served in critical areas. In fact, 34% (86 of 256) of ARNPs practiced in Jefferson and Fayette counties. Physician Assistants are just as unlikely to practice in rural areas. According to May 1996 Board of Medical Licensure statistics, PAs practiced in 11 of 28 critical counties. In May 1996, 103 of 262 Kentucky PAs practiced in Jefferson and Fayette counties.

As business and government grapple with rising medical costs, the growth of non physician practitioners needs to be studied. In the 1997 Federal Budget, Nurse Practitioners' and Physician Assistants' reimbursement was increased to 85% of Physician fees. While physicians absorbed the brunt of Medicare reimbursement reductions, ARNPs, PAs, Optometrists, and Chiropractors received hefty increases. Kentucky's experience with Medicaid and the growth of expenditures for non physician services further enforces these concerns.

The most disturbing element comes from well intentioned physician colleagues. During the 1998 Session, KMA was lobbied by physicians to support practice expansion of several groups including Marriage and Family Counselors and Athletic Trainers. In addition we received letters from physicians urging KMA to support reimbursement for RNs serving as Assistants at Surgery.

We are not opposed to professionalism among non physicians. This discussion is about patient care. Only finite resources are available for medical care. Managed care and increasing administrative costs to keep HMOs and other entities afloat will absorb every single additional health care dollar government and business can gin up. We stand at the crossroads where physicians may find themselves in a raging battle with a united force of non physician practitioners fighting for dwindling reimbursement dollars.

So, take seriously the growth and expansion of non physician practitioners, its effect upon patient care, and the future of medical practice. Ask yourself—Are physicians over trained and over educated in an era of mass changes in technology and the manner in which medicine is practiced? These are simply perspectives of a country doctor who still believes in the necessity of medical school supported by extensive and intensive residency training, high quality medical care, and the expenditure of the medical dollar in a wise and patient oriented manner.

Donald R. Stephens, MD
KMA President-Elect

NEWS FOR KENTUCKY PHYSICIANS

National Legislative Committee Report

Donald C. Barton MD, Chair

The AMA has established several legislative issues as priority for the 105th Congress:

- Health care quality and patient protection
- Fiscal year 1999 budget
- Fraud and Abuse
- Private Contracting
- Physician self referral
- Tobacco

Patient protection is a hot topic on both state and federal levels. KMA succeeded in developing and adopting an extensive package of patient protection and provider fairness legislation during the 1998 Kentucky General Assembly. While that's extremely good news, the bad news is that due to an exemption provided under the ERISA law, the legislation does not apply to all the people in Kentucky. Presently, the federal ERISA law exempts, "self insured" plans from most state insurance provisions. The exemption self insured plans enjoy from state mandates and other provisions prohibits the State Insurance Commissioner from intervening on behalf of the patient. Perhaps the most insidious exemption, which has been upheld by the highest court in the land, provides that ERISA plans are not liable for medical decision making. Representative Norwood of Georgia, a dentist, has introduced HR 2960, which is cosponsored by over 200 Representatives. HR 2960 removes that exemption and allows a patient or their family to sue self insured managed care plans when decisions lead to injury or death. This provision, commonly referred to as the "Texas Law" has been introduced in several states. The Texas Law is under attack in the federal courts. As you recall, KMA adopted a Resolution in the 1997 KMA House of Delegates last year supporting that concept. In fact, Senator Ernesto Scorsone of Lexington introduced the bill in the '98 Session. On the downside, AMA is greatly concerned with a provision in HR 2960 which expands the Any Willing Provider concept and in turn the practices of nonphysician providers.

Dr Ganske of Iowa has re-introduced his bill banning gag clauses and gag practices. As you recall, Republican leadership killed Ganske's bill last Session due to opposition from the Chamber of Commerce and big business. Senator Kyl has a companion bill in the Senate. Other legislation, including President Clinton's proposal, has extensive Patient Protections. At the AMA Leadership Conference in March, Speaker Gingrich and President Clinton both indicated that some form of patient protection would be adopted during this Session of Congress.

The Administration's 1999 Budget continues Clinton's quest for a single payer or national health system, incrementally, or piece by piece. As you recall, his 1998 budget called for the Child Health Insurance Program which was adopted. Clinton proposes expansion of Medicare by subsidizing Medicare premiums for seniors aged 62-65, who repay the subsidies through a surcharge on their monthly Part B premium after turning 65. Seniors aged 55-62 would be allowed to "buy into" Medicare under certain circumstances. The AMA is extremely concerned with these provisions, especially when the long term solvency of Medicare is already a major budgetary issue.

While the proposed budget does not call for frontal assaults on physician payments, it uses a back door approach by proposing user fees for filing nonelectronic claims, duplicate or unprocessable claims, registration and renewal participation in Medicare, and fees for certification and recertification surveys. The accumulative total of user fees would exceed $207 million — all coming out of physicians' pockets — one way or the other.

The issue of Fraud and Abuse has become politically popular among both Republicans and Democrats. The issue has been expanded to such an extent that there is little distinction between inadvertent errors and legitimate medical judgments versus true fraud. The facts belie some of the charges thrown out in the political arena. Physicians and other professionals reimbursed

under Part B won 70% of the appeals when carriers initially denied their claims. Presently, criminal penalties do not apply unless a provider had a specific intent to violate the law. AMA continues to urge Congress to oppose any attempt to repeal the "knowing and willful" intent standard. The False Claims Act has been used to pursue a number of high profile investigations. While hospitals have been the focus for these investigations, physicians will probably be the next target. AMA is supporting efforts to establish reasonable thresholds for triggering the application of the False Claim Act.

The AMA continues to work with Senator Kyl to enact the right of patients to privately contract for health care. The White House, Democrats, and especially the AARP, are opposing the Kyl proposal. Other issues in which AMA is concentrating include changes in the federal physician self-referral laws (Stark I and II). On the regulatory front, AMA is opposed to HCFA's proposed rule that would eliminate the requirement that nurse anesthetists be supervised by a physician in all approved hospitals and ambulatory surgical facilities where nurse anesthetists can practice independently. Of course, the E/M Guidelines continue to be a major issue with AMA and special meetings with all specialty groups are planned. The AMA obtained a 6 month delay in implementation of these guidelines.

In conclusion, it is obvious that there is much work to be done. It was recently reported that AMA topped the list — the number one organization in the US in terms of spending for lobbying by organizations or associations. The AMA expended $8.5 million from January to June 1997 in lobbying the Congress and Administration proposals. The report noted that AMA employs over two dozen lobbyists. All of this representation which takes place on behalf of every physician in the US, is accomplished by a relatively small group of physicians. In a recent report, it was noted that less than 31% of practicing physicians are members of AMA. In Kentucky we do a little bit better, by holding at about a 50% level. Obviously medicine's ability to negotiate is hampered when 69% of physicians refuse to bear part of the burden. Representation by specialty and subspecialty groups continues to grow as the "balkanization" of medicine undermines medicine's voice. The divide and conquer concept worked in other industrialized nations and obviously is working in the US. National consensus must take place within the physician community, especially among warring medical specialties and subspecialties if we are to survive.

Vote Here

In the year 2001, it is projected that 95% of physicians will be working under managed care contracts. WHO WOULD YOU CHOOSE to advise the Legislature on the new rules?

- ❑ 1. Trial Lawyers
- ❑ 2. Insurers
- ❑ 3. Alternative Care Providers
- ❑ 4. KEMPAC (Kentucky Medical Political Action Committee)

If you voted for #4, join today!

KEMPAC is the Kentucky Medical Association's bi-partisan political action committee. Its goal is to ensure that physicians have access to lawmakers and that the rights of the physician-patient relationship are protected in the legislative process.

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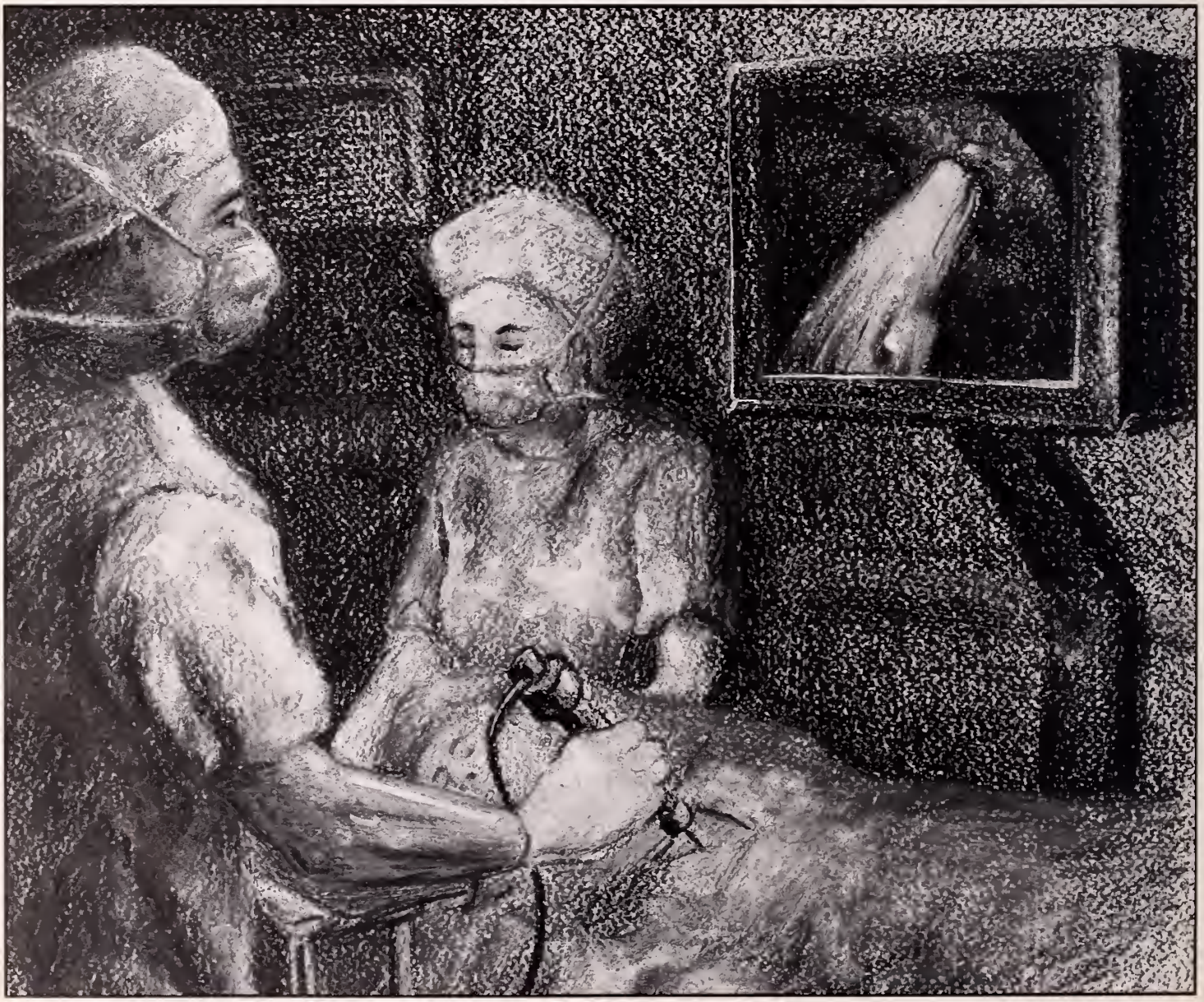
New Technology in Diagnosis and Treatment of Diseases of the Pleural Space

Eddy H. Carrillo, MD; Robert W. Linker, MD; J. David Richardson, MD



Recent developments in video camera technology, new instruments, and advanced surgical techniques have increased the importance of video-assisted thoracoscopic surgery (VATS). Currently, VATS offers a new approach in the diagnosis and treatment of many thoracic conditions previously treated only by standard thoracotomy. In our experience, VATS is a safe, reliable, and effective alternative to thoracic surgery. With further improvements and refinements in video imaging and endoscopic instruments, more procedures will be technically feasible. The long-term results of VATS compared to open thoracotomy will require extensive follow up and prospective trials to determine its true value.

Video-assisted thoracoscopic surgery (VATS) has assumed a major role in and become the standard of care for a variety of surgical diseases of the chest. Initially used primarily for diagnostic purposes, VATS now is used as an alternative to thoracotomy. Recent reports advocate VATS as the modality of choice for diagnosing and treating selected pathologic conditions of the chest.[1-4]

Hans Christian Jacobaeus[5] is credited with the first clinical application of thoracoscopy at the University of Stockholm in 1922, when he reported his experience in the management of pleural adhesions, biopsy of thoracic malignancies, drainage of empyemas, and the diagnosis and treatment of tuberculous pleural effusions. Thoracoscopy did not gain early widespread acceptance in the United States, and leading thoracic surgeons such as John Alexander actually discouraged use of the procedure.[3] However, thoracoscopy continued to be used mainly in Europe and South America as an aid for lung collapse therapy in patients with tuberculosis. With the advent of successful antituberculosis chemotherapy, the use of thoracoscopy dwindled. Renewed interest was generated by Branco,[6] who in 1946 described its value in patients with hemothorax secondary to penetrating injuries. In the 1970s and 1980s, other authors[7-9] described the value of thoracoscopy and established its role in the diagnosis of diaphragmatic injuries after penetrating thoracoabdominal injuries. In the last 5 years, the use of thoracoscopy has been fostered by the rapid development of laparoscopy, the advent of simplified endoscopic techniques, and improved video equipment and increased familiarity with the technique and equipment.

This review focuses on the recent advances in VATS. We will define the indications, benefits, and limitations of this technique in the diagnosis and treatment of diseases of the pleural space. The role of VATS in the diagnosis and treatment of thoracic injuries will not be discussed; it has been previously reported by this and other institutions and currently is accepted as the modality of choice for the diagnosis and treatment of many patients with thoracic injuries.[10-17]

Operative Setting, Technique, and Equipment

The operating team should be familiar with standard thoracic surgical procedures before attempting VATS. Thoracoscopy should be performed in the operating room with the patient under general anesthesia. A double-lumen endotracheal tube should be used for airway control to optimize exposure with one-lung ventilation after collapse of the ipsilateral lung. Arterial blood pressure, arterial oxygen saturation (SaO_2), end-tidal capnography ($Petco_2$), and electrical cardiac activity should be routinely monitored. Since most VATS procedures are completed in under 1 hour, short-acting intravenous anesthetics may be used to enhance the effect of inhalational anesthetics and to facilitate extubation at the completion of the procedure.

Once airway control has been achieved, the patient is placed in the corresponding full lateral decubitus or modified lateral position and secured to the operating table with a thoracic support device ("bean bag"). The ipsilateral arm is flexed 90° at the shoulder and the elbow is supported in an arm stand. The arm is then secured to allow motion that facilitates exposure and avoid injury during retraction (Fig 1).[3,10] Any torque of the thoracoscope against the intercostal spaces should be avoided.[18] This is extremely important in female patients, as well as in individuals with small frames. To facilitate viewing, we use a side-view thoracoscope (30°). To minimize trauma, we have used smaller thoracoscopes (5 mm). We use the anterior axillary line for placement of the thoracoscope and retrieval of specimens, because the anterior intercostal spaces are wider. Proper positioning of the patient and the endoscopic equipment and instruments is extremely important to ensure adequate visualization of the thoracic cavity and enable an open thoracotomy to be performed, if required. Always, the patient is prepared and draped as for full thoracotomy. The basic

From the Department of Surgery, University of Louisville (Drs Corrillo and Richardson), and the Center for Advanced Surgical Technologies (CAST) (Drs Corrillo, Linker and Richardson) at Norton Hospital, Louisville, KY.

Reprint requests to Department of Surgery, c/o Editorial Office, University of Louisville School of Medicine, Louisville, KY 40292 (Dr Corrillo). Phone: 502/852-1895. Fax: 502/852-8915.

New Technology in Diagnosis & Treatment of Diseases of the Pleural Space

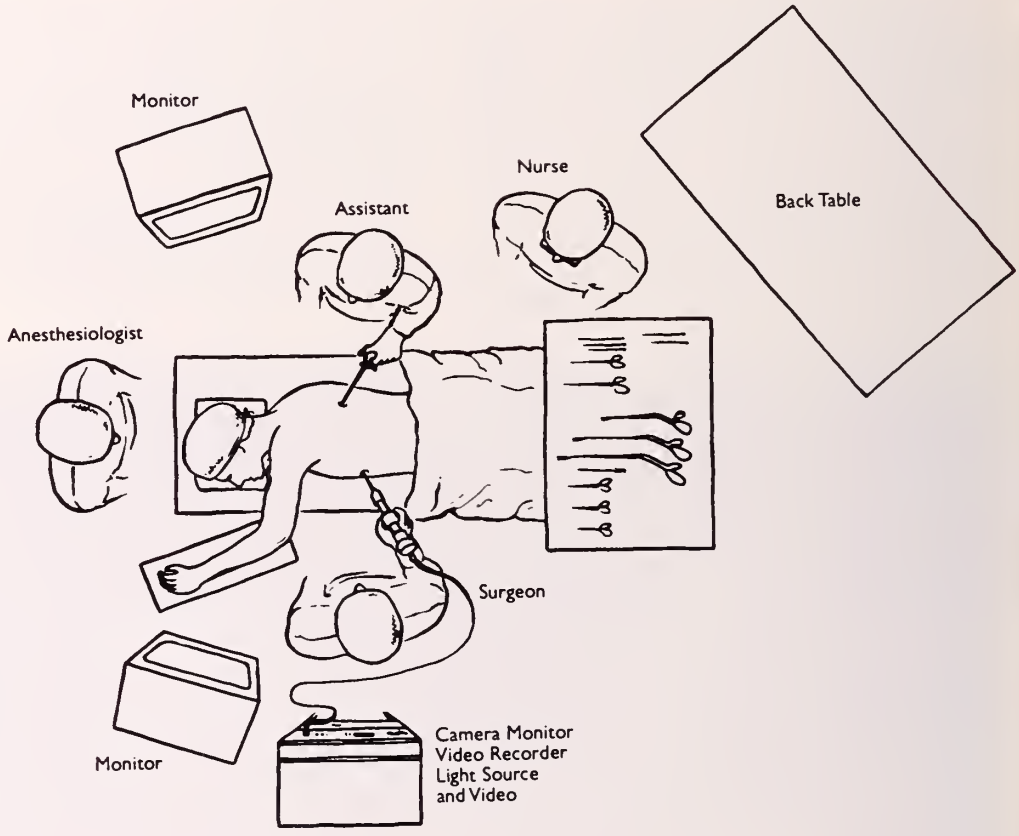


Fig 1— Operating room set up for VATS and orientation of the patient and video equipment. (With permission from Carrillo EH, Heniford BT, Etoch SW, Polk HC Jr, Miller DL, Miller FB, Richardson JD. Video-thoracic surgery in trauma patients. J Am Coll Surg. *1997;184:316-324).*

operative setting and instruments used during VATS are summarized in the Table.

Initiating the Procedure

The VATS procedure is begun by choosing an appropriate intercostal space for insertion of the video thoracoscope. The initial access site should facilitate visualization of the lesion and allow adequate distance for instrument manipulation. Posterior lesions are approached through a slightly anterior intercostal space access site; anterior lesions are approached through posterior axillary intercostal space sites. A preoperative review of the chest x-ray and computed tomography (CT) scans will facilitate both the three-dimensional location of the lesion within the hemithorax and the decision about which intercostal spaces are appropriate to place viewing and operating ports.[3] The table should be flexed in a 30° "jackknife" position to open the intercostal spaces, which facilitates the introduction of instruments into the thoracic cavity, and minimizes post-VATS intercostal neuritis. Initial digital exploration is used to rule out local pleural adhesions and avoid pulmonary injury (Fig 2).

Table 1. Basic Operotive Setting ond Instruments Used During VATS

Generol onesthesio in the aperoting room
Double lumen endotrocheol onesthesio
Stondord VATS instruments ond surgicol troy for open tharacotomy
0° and 30° thorocoscope with 16 × magnification
300 W xenon light source with autamatic brightness control
Couple chorged device camero
Two high-resolutian television monitors
Thorocic trocars, 10-, 12-, 15-mm ovoiloble
Endoscapic suction/irrigotor
Endoscopic blunt dissector
Endoscopic retroctors
Stondord surgicol suction instruments
Endoscopic stoplers ond clip appliers
Stroight ond curved ring farceps
Thorocostomy chest tubes and water seols

VATS = Video-ossisted thoracoscopic surgery.

Orientation During VATS

Using the "baseball diamond" concept for triangulation of the instruments and thoracoscope for strategic visibility and manipulation of the

target lesion will facilitate the orientation of the surgeon, endoscopic instruments, camera, thoracic lesion, and video monitor during VATS procedures. The surgeon, camera, and instruments should be pointed in the same direction, toward the lesion. The video monitor is placed so that surgeon, camera, lesion, and screen are all aligned (Fig 3). This will avoid awkward handling of instruments, due to the "mirror imaging" that results when the instruments are pointed toward the video endoscope.

Specimen Removal

A potential problem encountered with VATS is the removal of infected or malignant tissues from the thoracic cavity. These specimens should always be removed within a plastic container. To avoid contamination, we prefer to use one of the commercially available plastic-sleeved devices introduced through one of the intercostal entry sites. Larger specimens can be placed in a bowel bag, with one of the intercostal working incisions extended 3 to 4 cm without rib spreading, to allow extraction of the specimen.

Upon completion of the procedures, a chest tube thoracostomy is routinely performed under direct vision through one of the working incisions. The remaining wounds are inspected from within the chest for bleeding and then closed in layers.

Patient Selection and Indications for VATS

VATS has been shown to be a safe, reliable, and useful technique.[1-4,10-13] Since lung deflation is a key component of the technique, VATS is contraindicated in patients with inability to tolerate single lung ventilation. Caution should be used in patients with an obliterated pleural cavity secondary to infection or previous surgery, history of bleeding diathesis, and moderate-to-severe obstructive pulmonary disease. VATS has no role in the management of patients in unstable condition or in whom there are clear indications for an open thoracotomy.

Diagnostic and Therapeutic Applications

Pulmonary Nodules and Infiltrates

Thoracoscopic wedge resection is well suited for the evaluation of pulmonary nodules and diffuse pulmonary infiltrates, especially in immunocompromised patients. After insertion of the thoracoscope, the nodule or the area of maximal infiltration is identified. It is then grasped with regular ring forceps inserted through a separate incision. Through a third incision, one or two applications of an Endostapler (Endo-GIA®, United States Surgical Corporation, Norwalk,CT) are fired to perform a wedge resection of the involved lung parenchyma.

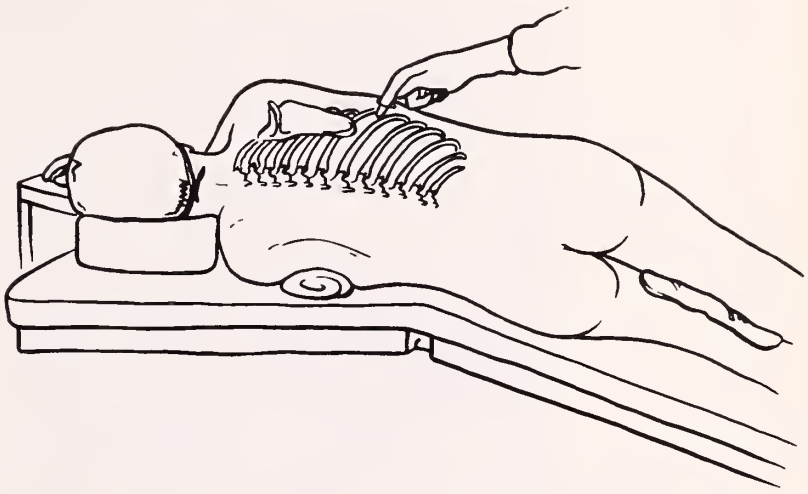


Fig 2— Proper positioning of the patient and initial digital exploration of the pleural space. (With permission from Carrillo EH, Heniford BT, Etoch SW, Polk HC Jr, Miller DL, Miller FB, Richardson JD. Video-thoracic surgery in trauma patients. J Am Coll Surg. *1997;184:316-324).*

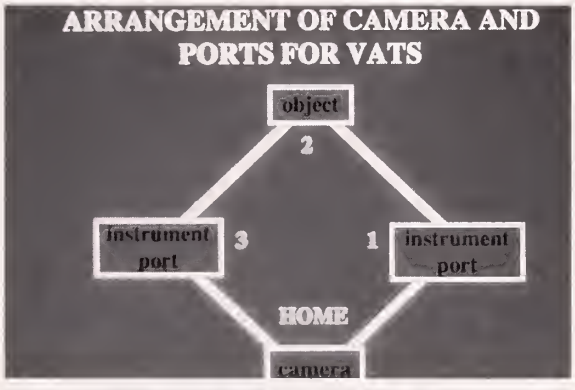


Fig 3— "Baseball diamond" concept for placement of the instruments and thoracoscope for orientation and for adequate visualization of the target pathology.

Pleural Effusions and Retained Thoracic Collections

Thoracoscopy has been shown to be an excellent technique for diagnosis and treatment of subacute, recurrent, and chronic pleural effusions.[2] It also

has been used successfully in the treatment of patients with chylothorax.[19] It is most useful for patients in whom pleurodesis will be performed simultaneously, and in those who have undergone unsuccessful pleural biopsies. VATS has been reported to be 100% accurate in determining the cause of the pleural effusion.[1] The awareness of retained thoracic collections after trauma or pulmonary diseases has increased with the widespread use of new imaging techniques, especially CT scan of the chest. In a review of our experience with 25 patients who underwent VATS for drainage of retained collections after trauma, we found that in 19 patients (76%) the collections were successfully drained. However, the technique was 100% successful when used less than 7 days after injury, and in those patients without evidence of thoracic infection.[11] Given this, we now use VATS in patients with retained post-traumatic hemothoraces as early as 48 hours after hospital admission, when conventional therapy has failed.

If patients with empyema are chosen for this technique, they ideally should be in the early transitional phase (fibrinopurulent stage). In patients with more organized collections, gentle dissection and peeling with sponge sticks and ring forceps usually allows the rind to be removed from the visceral and parietal pleuras, completely releasing the trapped lung. All the debris and necrotic tissue are removed and washed out with warm saline or antibiotic solution.[4,11] Always, a sample of fluid is collected for microbiological assessment.

Spontaneous or Persistent Post-Traumatic Pneumothorax

Currently, VATS has been shown to be the technique of choice for spontaneous pneumothorax as well as for persistent post-traumatic pneumothorax.[1-4,12,20] Preoperative CT of the chest is extremely useful to document the extent of parenchymal disease (Fig 4), since endostapling is not a good option in patients with extensive parenchymal involvement.[12,20]

In general, the source of the pneumothorax usually is identified; otherwise, VATS pleurodesis can be used to control small air leaks.[12,20] Our technique entails investigating the apex of the lung first to identify an active leaking bleb or bullae. If the site is not identified initially, the anesthesiologist is asked to partially release the occluding clamp of the double-lumen endotracheal tube. Warm saline is introduced in the thoracic cavity to identify the source of the air leak. Once the source is identified, an endostapler is fired at the base. In some patients, the use of endoligatures is required to shrink the base of the bullae, facilitating the placement of the endostapler. Lesions deep within the pulmonary parenchyma can be difficult to resect using endostaplers alone, and in these circumstances the use of neodymium-ytrium aluminum garnet (Nd: YAG) laser can spare unnecessary resection of normal pulmonary tissue. In post-traumatic pneumothorax, we do not perform pleurodesis routinely; however, in spontaneous pneumothorax, evidence suggests the value of this technique.[1,4,12,20]

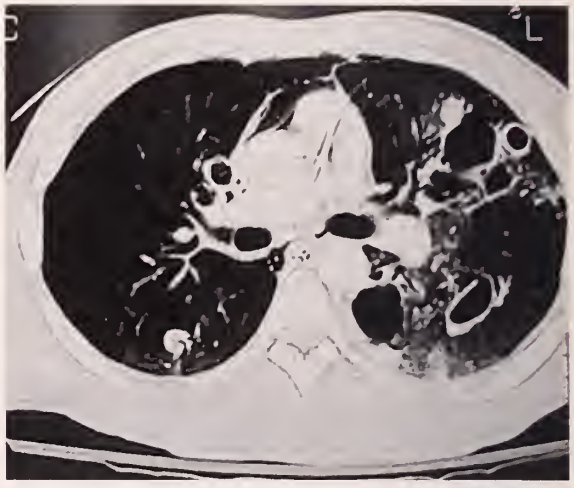


Fig 4— Computed tomography (CT) scan of the chest in a patient with spontaneous pneumothorax and extensive bilateral bullous disease.

Assessment of Mediastinal Structures and Resection of Mediastinal Tumors

Thoracoscopy offers an excellent view of the mediastinum in the left side of the chest. In the right side, usually there is more mediastinal fat, which makes dissection and identification of structures more difficult. VATS may be used as an adjunct to cervical mediastinoscopy for the staging of low mediastinal lymph nodes and as an alternative to the Chamberlain anterior mediastinotomy to assess the aorticopulmonary window and subazygous lymph node regions.[3]

Mediastinal dissection usually is simple, unless there is gross invasion by a tumor. Benign tumors can generally be removed with gentle traction and dissection with careful hemostasis. Most tumors can be removed easily through an extended manipulation incision. While VATS also offers an excellent alternative for biopsies and

staging of some malignant masses, we are very hesitant to perform VATS procedures for resection of documented malignancies, because it does not enable us to determine the extent of invasion.

Esophageal Surgery

Experience with thoracoscopy for several esophageal procedures such as myotomy for achalasia,[21] removal of benign tumors and cysts,[22,23] thoracoscopic antireflux surgery,[24] esophagectomy[3,4] and management of esophageal perforations is limited but growing.

Esophageal myotomy and truncal vagotomy are performed through the left side of the chest in the distal esophagus. The myotomy extends from the level of the inferior pulmonary ligament to 1 cm past the esophagogastric junction. Surgery in the distal esophagus requires that all instruments are directed toward the hiatus, and that the monitors are placed at the foot of the table to give the operators in-line orientation and prevent reversal of the image or "mirror viewing" (Fig 5). A 40 to 48 F Maloney esophageal dilator is introduced into the esophagus to facilitate the dissection during the myotomy. A flexible gastroscope can also be used to stent, transilluminate, and insufflate the esophagus to ensure mucosal integrity during the dissection. Diluted methylene blue can be used at the end of the myotomy to document any esophageal perforation.

Thoracoscopic esophagectomy and intrathoracic stapled esophagogastric anastomosis has been described for treatment of esophageal tumors.[4] We have found this technique to be more useful for assisted esophagectomies when a cervical anastomosis is performed. The patient is placed in the left lateral position. The thoracoscope is placed in the posterior axillary line, two separate ports are placed in the anterior axillary line for lung retraction, and two additional incisions (manipulation channels) are placed in the midaxillary line. The initial dissection is started away from the tumor, after the mediastinal pleura is bluntly and sharply dissected. Grasping the esophagus facilitates the dissection. Electrocautery or surgical clips are utilized for hemostasis. The placement of umbilical tapes at each end of the esophagus during the laparotomy and cervical exploration also facilitates manipulation of the esophagus.

In esophageal perforations, surgical repair of the perforation remains the treatment of choice. However, in selected patients, VATS may have a role as an initial technique for irrigation of the pleural cavity, with placement of drains under thoracoscopic guidance while the patient is stabilized. A definitive repair is attempted at a later date.

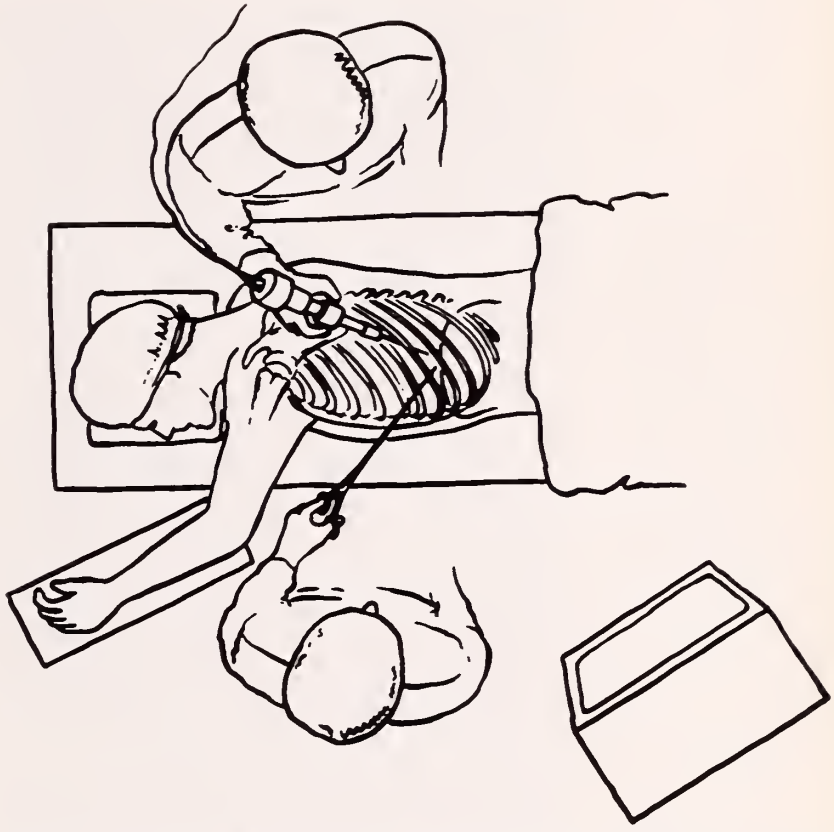


Fig 5— Positioning of the monitor during evaluation of the diaphragm and distal esophageal surgery. (With permission from Carrillo EH, Heniford BT, Etoch SW, Polk HC Jr, Miller DL, Miller FB, Richardson JD. Video-thoracic surgery in trauma patients. J Am Coll Surg. *1997;184:316-324).*

Thoracic Sympathectomy

Thoracic sympathectomy for pain control or ulcer healing has been used for some vasospastic conditions (eg, Raynaud's disease, Buerger's disease). Measuring the skin temperature before and after the procedure will document the success of the sympathectomy. During the dissection, excision of stellate ganglions are avoided to prevent Horner's syndrome, a reported complication of this technique.[1]

Pericardial Window and Pericardiectomy

The most important technical detail of this procedure is to avoid injury to the phrenic nerve, which should be routinely identified and main-

tained under visualization throughout the procedure. In patients with pericardial tamponade or effusion, a small stab incision is initially made and subsequently extended along the vertical axis, if needed.[4] In patients with traumatic pericardial ruptures, the pericardial rent usually is extended to a completion pericardiotomy to avoid cardiac herniation and subsequent strangulation.[25] In patients requiring bilateral pericardiectomy for constrictive pericarditis, the left and right sides are resected as in an open procedure, with dissection that avoids injury to the coronary vessels or phrenic nerve.

Lobectomy and Pulmonary Resections

Pulmonary resections, particularly in the periphery of the lung, are easily accomplished. Pulmonary lobectomies usually require additional ports to facilitate exposure and dissection of the pulmonary lobe. It is easier through an extended manipulation incision to introduce standard instruments and proceed with the dissection and resection through this approach.[3,4] In patients with documented and resectable lung carcinomas, the value and benefits of VATS thoracoscopy has not been completely defined, and prospective studies will be needed before this technique can be proposed as a reasonable alternative to an open thoracotomy. However, it is a technically feasible option that can be exercised in selected patients.

Complications of VATS

Although thoracoscopy has been shown to be a safe technique, occasional complications can be expected. The most common complications include chest wall bleeding at the site of the incisions, lung lacerations, intercostal neuritis, and neuroma formation secondary to the use of screwing trocar ports, or from excessive levering of the thoracoscopic instruments.[10,18] Complications from anesthesia are related to the placement of the double lumen endotracheal tube and ventilation of the patient, including hypercarbia, hypoxia and, occasionally, cardiac arrhythmias. Most often, these are corrected after resumption of bilateral lung ventilation. Careful monitoring of the patient should always be part of a VATS procedure.

Future Applications

Video-assisted thoracoscopy is slowly gaining acceptance in the diagnosis and treatment of thoracic diseases, and its use appears to be increasing, as more reports indicate its feasibility and safety. Soon, the clinical use of endoscopic ultrasound, three-dimensional imaging, improvement in endoscopic instruments and the development of a thoracoscope with working channels may very well expand the indications for VATS.

Credentialing and monitoring the results of this technique through the appropriate organizations is extremely important, both to maintain standards and avoid the uncontrolled proliferation of VATS with no quality control. Also, more complex procedures should be studied scientifically through well-designed prospective clinical trials.

In summary, the initial enthusiasm for VATS has been replaced by critical evaluation of its role in comparison to standard surgical thoracotomy. We believe that VATS is safe, reliable, and an effective and excellent alternative to open thoracotomy. When used properly, it will not compromise the patient's recovery and survival, and the cosmetic results and recovery of the patient are superior to an open thoracotomy. Our experience has been that VATS is truly a minimally invasive endoscopic surgery, only slightly more invasive than tube thoracostomy.

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References

1. Yim APC, Ho JKS, Chung SS, et al. One hundred and sixty-three consecutive video thoracoscopic procedures: the Hong Kong experience. *Aust N Z J Surg.* 1994;64:671-675.
2. Salo JA. The role of videothorascopy in the diagnosis and treatment of chest diseases. *Ann Med.* 1994;26:401-404.
3. Keenan RJ, Landreneau RJ, McKneally MF. Video-assisted thoracic surgery. In: Pearson FG, Deslauriers J, Ginsberg RJ, et al, eds. *Thoracic Surgery.* 1st ed, New York, NY: Churchill Livingstone; 1995:131-140.
4. Liu HP, Chang CH, Lin PJ, Hsieh HC, Chang JP, Hsieh MJ. Video-assisted thoracic surgery. The Chang Gung experience. *J Thoracic Cardiovasc Surg.* 1994;108:834-840.
5. Jacobaeus HC. The practical importance of thoracoscopy in surgery of the chest. *Surg Gynecol Obstet.* 1922;34:289-293.
6. Branco JMC. Thoracoscopy as a method of exploration in penetrating injuries of the chest. *Dis Chest.* 1946;12:330-335.
7. Jackson AM, Ferreira AA. Thoracoscopy as an aid to the diagnosis of diaphragmatic injury in penetrating wounds of the lower chest. A preliminary report. *Injury.* 1976;7:213-217.
8. Jones JW, Kitahama A, Webb WR, McSwain N. Emergency thoracoscopy: A logical approach to chest trauma management. *J Trauma.* 1981;21:280-284.
9. Adamthwaite DN. Penetrating injuries of the diaphragm. *Injury.* 1982;14:151-158.
10. Carrillo EH, Heniford BT, Etoch SW, et al. Video-assisted thoracic surgery in trauma patients. *J Am Coll Surg.* 1997; 184:316-324.

11. Heniford BT, Carrillo EH, Spain DA, Sosa JL, Fulton RL, Richardson JD. The role of thoracoscopy in the management of retained thoracic collections after trauma. *Ann Thorac Surg.* 1997;63:940-943.
12. Carrillo EH, Schmacht DC, Gable DR, et al. Thoracoscopy in the management of persistent post-traumatic pneumothorax. *J Am Coll Surg.* In press.
13. Sosa JL, Puente I, Lemasters L, et al. Videothoracoscopy in trauma: Early experience. *J Laparoendosc Surg.* 1994;4:295-300.
14. Ochsner MG, Rozycki GS, Lucente F, Wherry DC, Champion HR. Prospective evaluation of thoracoscopy for diagnosing diaphragmatic injury in thoracoabdominal trauma: A preliminary report. *J Trauma.* 1993;34:704-710.
15. Mancini M, Smith LM, Nein A, Buechter KJ. Early evacuation of clotted blood in hemothorax using thoracoscopy: Case reports. *J Trauma.* 1993;34:144-147.
16. Graeber GM, Jones DR. The role of thoracoscopy in thoracic trauma. *Ann Thorac Surg.* 1993;56:646-648.
17. Ivatury RR, Ochsner MG, Simon R, Lowery RC. Cavitary endoscopy. In: Ivatury RR, Cayten CG, eds. *The Textbook of Penetrating Trauma.* 1st ed, Media, PA: Williams & Wilkins; 1996:423-431.
18. Yim APC. Minimizing chest wall trauma in video-assisted thoracic surgery. *J Thorac Cardiovasc Surg.* 1995;109:1255-1256.
19. Graham DD, McGahren ED, Tribble CG, Daniel TM, Rodgers BM. Use of video-assisted thoracic surgery in the treatment of chylothorax. *Ann Thorac Surg.* 1994;57:1507-1512.
20. Jimenez-Merchan R, Garcia-Diaz F, Arenas-Linares C, Giron-Arjona JC, Congregado-Loscertales M, Loscertales J. Comparative retrospective study of surgical treatment of spontaneous pneumothorax. *Surg Endosc.* 1997;11:919-922.
21. Pellegrini C, Wetter LA, Patti M. Thoracoscopic esophagomyotomy. Initial experience with a new approach for the treatment of achalasia. *Ann Surg.* 1992;216:291-293.
22. Bardini R, Segalin A, Ruol A, Percchia A. Videothoracoscopic enucleation of esophageal leiomyoma. *Ann Thorac Surg.* 1992;54:576-577.
23. Salo JA, Kiviluoto T, Heikkila LJ, Perhoniemi V, Lamminen A, Kivilaakso E. Enucleation of an intramural esophageal lipoma by videothoracoscopy. *Ann Chir Gynaecol.* 1993;82:66-69.
24. Salo JA, Kiviluoto T, Heikkila L, Nemlander A, Ikonen T, Kivilaakso E. Thoracoscopic fundoplication. *Ann Chir Gynaecol.* 1993;82:199-201.
25. Carrillo EH, Heniford BT, Dykes JR, McKenzie ED, Polk HC Jr, Richardson JD. Cardiac herniation producing tamponade: The critical role of early diagnosis. *J Trauma.* 1997;43:19-23.

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Pulmonary Function Testing: Detection of Invalid Performance

Sandra Schuldheisz, MD; Barbara A. Phillips, MD, MSPH; David T. R. Berry, PhD

We surveyed physician members of the American Thoracic Society and their technicians regarding indicators of the validity of PFTs. Surveys were returned by 50 physicians and 52 technicians. Both groups felt that consistency of effort and the shape/slope of the curve were important indicators, with behavioral observations rated slightly lower. Approximately 38% of physicians and 19% of technicians felt that they detected 75% or fewer of individuals giving inadequate effort during PFTs. Twenty percent of physicians and 29% of technicians were using quantitative criteria other than those recommended by the 1979 "Snowbird" technical paper to determine acceptability of PFTs. Twenty-eight percent of physicians and 31% of technicians spontaneously indicated that patients pursuing compensation or disability claims for pulmonary disorders were most likely to give suboptimal effort. Empirical research into the impact and detection of suboptimal effort on PFTs is encouraged.

From the Pulmonary and Critical Care Division, Department of Medicine, College of Medicine (Drs Schuldheisz and Phillips); and the Department of Psychology (Dr Berry), University of Kentucky, Lexington, KY.

Recently, the Kentucky General Assembly dramatically revised the procedures for disability determination of pneumoconiosis in the Commonwealth.[1] A major change has been an increased emphasis on radiographic testing and pulmonary function testing in these disability determinations. These changes may prove to be problematic from at least two perspectives: ambiguities in interpretation of radiographic findings and the role of patient motivation in pulmonary function tests (PFTs).

Radiographic evaluation of individuals with coal-workers' pneumoconiosis (CWP) has inherent weaknesses. For example, radiographs of individuals who have never worked in coal mines may show the same patterns as those of exposed individuals.[2,3] Further, cigarette smoking alone may result in radiographic findings identical to those found in CWP.[4] Given the facts that cigarette smoking is highly prevalent in Kentucky, that false positive radiographic findings may occur in individuals without coal dust exposure, that CWP is the most common basis for pulmonary related disability claims in Kentucky, and that radiographic findings overlap considerably in CWP and other conditions, the stage may be set for inaccurate and costly determinations in disability evaluations.

Because the new statute dictates that disability claimants with radiographic findings compatible with CWP must then undergo PFTs to establish the functional impact of their abnormal findings, the validity of PFT results is an important issue.

Because individuals undergoing PFTs must exert reasonable and at times strenuous effort in order to achieve interpretable results, the issue of motivation of the test-taker may be of concern. Individuals involved in disability evaluations may harbor conflicting goals during their PFTs, wanting on the one hand to cooperate with the technician administering the test, but on the other hand desiring financial award for their perceived disability. To the extent that PFT depends on adequate effort by the patient, these conflicting motivations may in some cases pose a threat to the validity of test results.

The importance of adequate effort during PFTs is in fact highlighted by the 1979 "Snowbird Paper,"[5] still the accepted standard in the area. According to this document, the technician must observe "that the patient understood the instructions and performed with a smooth continuous exhalation, with apparent maximal effort, with a good start and without" a variety of potential confounds such as coughing or early termination which might invalidate the results. The standards outlined in the paper also emphasize the need to obtain consistent results from at least three acceptable curves, with two of the best three curves varying by not more than +/− 5% of reading or +/− 100 ml, whichever is greater.

Given the clearly defined need for adequate effort in obtaining valid PFT results, the expressed

Table 1. Physician Responses to PFT Survey

Variable		
Annual Number Spirograms	M (SD)	1216 (887)
Importance of Consistency	M (SD)	5.46 (.93)
Importance of Shape of Curve	M (SD)	5.46 (.86)
Importance of Technician Notes	M (SD)	5.00 (.95)
Percentage of Inadequately Motivated Patients Detected	1-25%	4%
	26-50%	4%
	51-75%	30%
	76-99%	58%
	100%	4%
Criteria for Determining Acceptable Consistency	±3%	4%
	±5%	80%
	±7%	8%
	±10%	2%
	NR	6%
Type of Patient Most Likely to Give Suboptimal Effort		
Compensation/Disability	28%	
Ill/Weak/Fatigued	14%	
Elderly	12%	
Poor Education/Illiterate	8%	
Depressed/Neurotic	8%	
Children	6%	
No Response	6%	
COPD	4%	
Pain	3%	
Other Response	11%	

Table 2. Technician Responses to PFT Survey

Variable		
Annual Number Spirograms	M (SD)	1593 (1799)
Importance of Consistency	M (SD)	5.48 (.75)
Importance of Shape of Curve	M (SD)	5.33 (.92)
Importance of Technician Notes	M (SD)	4.83 (1.2)
Percentage of Inadequately Motivated Patients Detected	1-25%	4%
	26-50%	15%
	51-75%	60%
	76-99%	21%
	100%	4%
Criteria for Determining Acceptable Consistency	±3%	15%
	±5%	71%
	±7%	2%
	±10%	4%
	NR	8%
Type of Patient Most Likely to Give Suboptimal Effort		
Compensation/Disability	31%	
Elderly	10%	
Children	10%	
Depressed/Neurotic	9%	
Poor Education/Illiterate	7%	
COPD	6%	
Angry	4%	
No Response	3%	
Other Response	19%	

concern in the literature regarding the impact of suboptimal effort in selected cases,[6-9] and the new importance of PFT results in Kentucky's pneumoconiosis disability determination guidelines, we undertook a survey to determine current clinical practice and thinking in this area.

Methods

We constructed a survey instrument requesting information on several aspects of PFTs from active pulmonologists and technicians across the country. The questionnaire is reproduced in Appendix A. This instrument was faxed to 200 randomly selected physicians listed in the American Thoracic Society membership directory. Physicians were requested to complete the instrument, to ask their PFT technicians working in laboratories with which they were associated to complete a second copy of the instrument, and to fax their results to us.

Results

We received responses from 50 physicians and 52 technicians, a return rate of approximately 25%. Tables 1 & 2 present results from the physician and technician respondents respectively on the importance of various factors in assessing the validity of PFT results. It can be seen that consistency of effort and the shape/slope of the curve were rated as highly important by both physicians and technicians in determining the validity of PFT results. Behavioral observations were also rated as important for this determination, although not quite as highly as the other two factors.

Regarding detection of inadequately motivated patients, relatively few technicians and physicians felt that they were able to detect all patients giving suboptimal effort. In fact, 38% of physicians and 19% of technicians felt they detected only three-quarters or fewer of patients giving suboptimal effort on PFTs. These results suggest some concern by front-line personnel regarding their ability to identify patients who are inadequately motivated during PFTs.

A second finding of interest was the variability of quantitative criteria used to determine acceptability of PFT results. Twenty percent of physicians and 29% of technicians indicated that they used a criterion other than the one expressed in the 1979 Snowbird technical paper to determine acceptability of PFT results from a quantitative standpoint.

A third important finding of interest was that

28% of physicians and 31% of technicians spontaneously indicated that the type of patient most likely to give suboptimal effort was one who was involved in disability or compensation determination.

Conclusions

This preliminary national survey of physicians and technicians working with PFTs indicated that persons involved in compensation seeking are thought to be the most likely to give inadequate effort on testing, and that only a minority of medical personnel believed that they detected all such individuals. Given the new importance of PFT results in Kentucky's pneumoconiosis disability procedures, it appears that empirical research into this issue is badly needed. One other relevant issue is the fact that quantitative criteria used to determine the acceptability of PFT results vary from recommended standards in a significant minority of PFT laboratories. This factor may also influence the validity of results from PFTs used in disability determinations.

References

1. House Bill 1 (HB-1), General Assembly, Commonwealth of Kentucky, December 12, 1996.
2. Meyer JD, Islam SS, Ducatman AM, McCunney RJ. Prevalence of small lung opacities in populations exposed to dust. *Chest.* 1997;11:404-410.
3. Epstern DM, Miller WT, Bresmitz EA, Leuke MS, Gefter W. Application of ILO classification to a population without industrial exposure: Findings to be differentiated from pneumoconiosis. *AJR* 1984;142:53-58.
4. Blanc PD, Gamsu G. The effect of cigarette smoking on the detection of small radiographic opacities in inorganic dust diseases. *J Thorac Imag.* 1988;3:51-56.
5. ATS Statement — Snowbird workshop on standardization of spirometry. *Am Rev Respir Dis.* 1979;119:831-838.
6. Suratt PM, Hooe DM, Owens DA, Anne A. Effect of maximal versus submaximal effort on spirometric values. *Respiration.* 1981;42:233-236.
7. Park SS. Effect of effort versus volume on forced expiratory flow measurement. *Am Rev Respir Dis.* 1988;138:1002-1005.
8. Krowka MJ, Enright PL, Rodarte JR, Hyatt RE. Effect of effort on measurement of forced expiratory volume in one second. *Am Rev Respir Dis.* 1987;136:829-833.
9. Crapo RO. Pulmonary function testing. *N Engl J Med.* 1994;331:25-30.

Appendix A

SURVEY ON EFFORT, MOTIVATION AND PFTS
PHYSICIAN FORM

Nome:_____Position:_____

Lob nome or locotion: _____

Phone #: _____FAX #:_____

Estimoted onnuol number of spirogroms/flow volume loops: _____

Please rote the following for importonce in determining patient effort/motivotion during spirometry/flow volume loops using the scole below:

	Useless 1	2	3	4	5	Essentiol 6
Consistency of effort _____						
Shope/slope of curve _____						
Tech notes on potient behavior _____						

Please list ony other indicotors of effort you have found useful:

Of potients who ore NOT giving optimol effort, whot percentoge do you think you DETECT (please circle one)?

0% 1-25% 26-50% 51-75% 76-99% 100%

Whot criterio do you use to determine occeptoble consistency of effort (please circle one)?

within 3% of best within 5% of best within 7% of best other_____

Whot techniques does your lob use to obtoin the potient's best effort?

_____

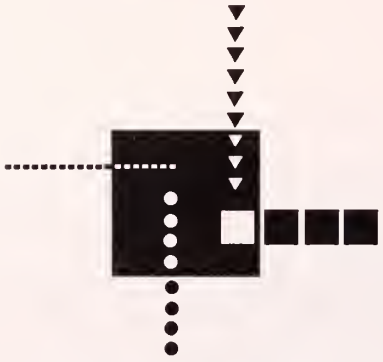
In your experience, whot types of potients, if ony, ore less likely to give optimol effort during pulmonory function testing? _____

_____

Thonk you for your help. Pleose FAX to Dr Phillips ot (606) 323-1020.

Pleose check here if you would like o summory of our findings faxed to your number given obove ❑.

Your Success is Our Goal



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Your success depends on your involvement! Plan today to attend the 1998 Annual AMA-OMSS Assembly Meeting on June 11-15, at the Sheraton Chicago Hotel and Towers. To receive more information and registration materials, please call **800 621-8335 and ask for the Department of Organized Medical Staff Services.**

* The American Medical Association Organized Medical Staff Section (AMA-OMSS) leads and assists grassroots physicians, individually and in groups, to organize and reclaim their role as medical leaders and advocates for excellence in patient care, professionalism, and the integrity of the patient-physician relationship. We provide practical educational forums, focused policy development, and grassroots support through the Federation.

** The AMA designates this education activity for a maximum of 8.5 hours in category 1 credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

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Physicians dedicated to the health of America

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KMA Legislative Report

KENTUCKY MEDICAL ASSOCIATION

REPORT ON THE

1998 KENTUCKY GENERAL ASSEMBLY

WALLY O. MONTGOMERY, MD, CHAIR

The 1998 Kentucky General Assembly adjourned on April 15. During the 1998 Session, 1709 bills and resolutions were introduced, and KMA followed and closely monitored 237 proposals. While "media wise" social issues were dominant, there were several landmark budgetary issues, particularly in higher and secondary education funding and tax base restructuring, which ultimately may become the true legacy of the 1998 Session. The economic upswing and resultant stabilization of the economy was good news for Kentucky as it was for the nation. On behalf of the Association, we are deeply appreciative of members of the General Assembly and the Administration for their support on many issues of concern to medicine. We thank those physicians and spouses who contacted their Legislators on important legislation relating to patient care and the profession. In addition we want to recognize the KMA Alliance for their assistance by operating the Phone Bank in 1998. Everyone on the legislative team including KMA leadership, lobbyists, and staff did an outstanding job. We are profoundly indebted to Representative Bob M. DeWeese, MD, for his statesmanship and political astuteness in guiding several patient oriented legislative proposals through the 1998 Kentucky General Assembly.

The KMA House of Delegates established the following legislative priorities for the 1998 Session:

- Patient Protection/Provider Fairness
- Professional Liability Reform
- Health and Safety

For readership purposes, this report is categorized into 12 Sections:

- Patient Protection/Provider Fairness
- Professional Liability/Plaintiff Lawyers
- Health and Safety
- Non Physician Practitioners
- Alternative/Complementary Health
- Medicaid
- Kentucky Child Health Insurance Program
- Abortion/Marriage
- Certificate of Need
- Other Medical Issues
- Health Insurance
- Non Medical Issues

PATIENT PROTECTION

KMA's primary focus during the 1998 Session was to enact Patient Protection and Provider Fairness legislation in accordance with House of Delegates directives. KMA elected to include Patient Protection/Provider Fairness legislation within HB 315, the DeWeese-Damron proposal to reform health insurance, rather than presenting the proposal as a separate and distinct bill. The legislative strategy to include Patient Protection/Provider Fairness in HB 315 was made in consultation with General Assembly leadership, sponsors of the legislation, KMA leadership and lobbyists. Based on reports from other states and AMA's experience with the 1997 Congress, this turned out to be the correct decision. In 1997 Chambers of Commerce, business and the managed care industry coalesced to defeat these proposals in Congress and several states.

HB 315 included the following Patient Protection/Provider fairness components: **(Adopted)**

Patient information from insurers:
Requires all insurers to state, in writing, the conditions, terms and information, such as appeals mechanisms, prior authorization procedures, restrictions on access to providers, and other review mechanisms imposed by the insurer.

Financial disclosure to patients:
Managed care plans must include lists of physicians, by county, specialty and hospital affiliation, and disclose any financial incentives from the managed care plan and other appropriate consumer information.

Adequate staffing:
All managed care plans must have sufficient numbers of primary care, specialist providers, and facility access for their enrollees. Telephone access to the plan must be available, and reasonable standards must be established for waiting times to obtain appointments.

Choice of primary care provider:
Adequate choices of primary care must be available. Patients must be allowed to choose their primary care provider from the plan list.

Use of Specialists as primary care provider:
Plans must permit patients to use specialists as a primary provider when medical conditions warrant.

Prudent layperson definition of emergency:
Emergency care must be available without prior authorization, and the definition of "emergency" must be defined in terms a "prudent layperson" understands.

Prohibit gag clauses:
Plans are prohibited from limiting providers disclosure of medical conditions or treatment options to patients.

Once prior approval is granted claim can only be rejected in cases of fraud:
When prior approval has been obtained, coverage shall not be retrospectively denied unless the approval was based upon fraudulent, materially inaccurate, or misrepresented information by either the patient or the provider.

Requires managed care to comply with "Do not substitute" provision:
When a physician determines that generic substitution of a pharmaceutical product is medically inappropriate, the pharmacist shall prescribe the product the physician determines medically appropriate with the indication "do not substitute." No substitution shall be made without the physician's approval.

PROVIDER FAIRNESS

De-selection/Termination of provider
Each plan must have a policy governing de-selection or termination of a provider from a network. If requested by the provider, the network must provide a reason for termination and hold a hearing within 30 days.

Medical Director
The Medical Director must be licensed in the state in which he or she is employed, and is responsible for treatment policies, protocols, quality assurance activities, and utilization management decisions of the plan. Decisions to deny, reduce, or terminate a health care benefit or to deny payment for a health service, because that service is not medically necessary, shall be made by a physician.

Prohibit "most favored nation clauses"
Insurance contracts cannot contain a most favored nation provision unless the Commissioner determines the market share of the insurer is nominal.

Prohibit discriminatory payments to providers
Providers under the guaranteed acceptance program (GAP) shall be reimbursed at rates that are no less favorable than the rates paid to comparable providers for services delivered to enrollees who do not have a high-cost condition.

Point of service option
Every plan must provide "point of service" or out-of-network benefits to every contract holder that allows a covered person to receive covered services from out-of-network providers without having to obtain a referral.

Any willing provider
Health insurers cannot discriminate against any provider who is located in the geographic coverage area of the health benefit plan and is willing to meet the terms and conditions for participation established by the health insurer, including Medicaid and Medicaid partnerships.

Insurer accountability
Insurer accountability for limiting coverage for any treatment, procedure, drug, or device is required. When coverage is denied, a letter provided in a timely manner must identify the person making the denial; give the reason for the denial; and, outline alternative services, treatment, or procedures.

PROFESSIONAL LIABILITY REFORM/PLAINTIFF LAWYERS

KMA's other primary legislative goal was tort reform. Due to Patient Protection/Provider Fairness legislation, we spent an inordinate amount of time on the "tort reform" defensive, opposing bills disguised as "social legislation," which in reality were efforts by plaintiff lawyers to expand rights of actions.

Wrongful Death/Fetal Personhood

HB 293 Currently, there is no claim for "loss of consortium" where an "unborn child in utero without regard to state of gestation" is involved. HB 293 would have provided for damages to be recovered for the death and "for grief and loss of companionship" from the person who caused it. While the bill exempted physicians and mothers participating in the abortion, it provided no protection for physicians performing OB care, amniocentesis, or prescribing medications.

Waiver of Sovereign Immunity

HB 667 granted a waiver of sovereign immunity if the state purchased liability insurance or maintained self-insurance. HB 667 would have placed at risk physicians employed by the state or its entities, and physicians serving on state boards and commissions.

Cause of Action Against a Third Party Defendant

HB 796 would have eliminated the statue of limitations regarding claims against third party defendants in malpractice and other personal injury actions.

Definition of a Person

SB 249 proposed amending statutes to include all human beings from fertilization to death in the definition of a person.

Parental Consent Prior to Counseling/Treating Minors

SB 294 mandated, "by statute," that physicians obtain consent from parents/guardians before diagnosing, treating, or counseling minors (0-18).

HMO Liability for Patient Injury

SB 322 required HMOs making medical treatment decisions to be liable for damages for harm to an enrollee.

Tort Reform

SB 411 proposed to limit damages, attorney solicitation of clients, regulate attorney fees and punitive awards, provide for structured settlements, and limit non-economic loss. SB 411 was an effort to reintroduce serious discussion of broad sweeping tort reform and may be a precursor to tort reform in 2000.

HEALTH & SAFETY

Motorcycle Helmet Law

HB 106 permits individuals over 21, with a prescribed training course, to operate motorcycles without helmets. **(Adopted)**

Tobacco

SB 146 transferred jurisdiction of minors who illegally purchase tobacco products from the Department of Agriculture to the Juvenile Session of District Court. HFA 3 prohibited purchase of tobacco products by persons under age 18. HFA 4 prohibited persons from providing persons under 18 with tobacco products. **SB 146 was adopted—but HFA 3 & 4 were defeated.**

SB 307 prohibits "individual" sales of cigarettes. **(Adopted)**

HB 381 Permitted local governments to enact more stringent penalties to restrict youth access to tobacco. Amended to a "Task Force on Teens and Tobacco." **Passed the House but died in the Senate.**

HB 561 prohibited possession of tobacco by persons under 18.

HB 917 Imposed 25 cent tax per pack on cigarettes for agricultural assistance and diversification.

Driving Under the Influence (DUI)

HB 327 reduced the allowable BAC from 0.10 to 0.08.

HB 455 Individuals blowing above 0.18 BAC become Class D felons. **(Adopted)**

Water/Boat Safety

HB 1 establishes age limits for operators to enhance water safety. **(Adopted)**

TB Testing

HB 131 eliminated the requirement for TB testing. **(Adopted)**

Hepatitis B

HB 156 Mandates Hepatitis B test for pregnant women. **(Adopted)**

Closing Restaurants When Imminent Danger to the Public Exists

SB 68 permits health departments to close restaurants without a hearing in the presence of imminent danger to the public. **(Adopted)**

Pick-up Truck/Riders

HB 192 prohibited minors from riding in open vehicles on public highways.

Bicycle Helmets

HB 254 required minors under age 12 to wear helmets when riding bicycles.

HB 189 requires study of promising health care services to school children by school personnel not licensed or certified to perform health care services. **(Adopted)**

NON PHYSICIAN PRACTITIONERS

Nurses

HB 187 requires nurses and other licensed, registered, certified, or otherwise regulated employees in a hospital to wear badges or insignia, provided it does not violate sterile procedures. **(Adopted)**

HB 190 Permits ARNPs to sign statements that a child's medical condition prevents or renders inadvisable attendance at school. **(Adopted)**

HB 285 Permits nurses who have successfully completed required training to make determinations of death. **(Adopted)**

HB 603 requires that nursing facilities provide for a criminal record check of nurses as a condition of employment. **(Adopted)**

HB 637 created a "Clinical Nurse Specialist" permitted to prescribe under ARNP guidelines.

Optometrists

SB 356 mandated direct access to managed care patients by optometrists. **(Withdrawn)**

Athletic Trainers

SB 285 expanded the practice of athletic trainers by permitting them to work with "physicians," rather than "team physicians" and broadly defined the term "athlete."

Clinical Exercise Physiologist

HB 403 licensed Clinical Exercise Physiologists.

Physician Assistants

SB 28 permits PAs in a collaborative agreement with a physician to prescribe non-legend drugs. **(Adopted)**

Pharmacists

HB 649 authorizes pharmacists to assist patients dealing with tests in inventory and which can be sold without a prescription or order. Pharmacists with collaborative agreements and as authorized by the collaborating physician, may perform additional tests and perform appropriate follow up treatment as permitted under the terms of the agreement with the physician. **(Adopted)**

Marriage and Family Counselors

SB 380 licenses Marriage and Family Counselors**. (Adopted)**

Pastoral Counselors

HB 608 Requires "fee based" Pastoral Counselors to be certified**. (Adopted)**

Paramedics

HB 285 permits Paramedics who have completed a required training course to make determinations of death. **(Adopted)**

ALTERNATIVE/COMPLEMENTARY HEALTH

Naturopathy

HB 158 licensed Naturopaths, granted prescriptive privileges, allowed them to perform minor surgery, remove foreign objects, perform acupuncture, obstetrical delivery, manipulative therapy, and other medical procedures and services.

Acupuncture

HB 160 established the Board of Acupuncture/Oriental medicine. HB 160 authorized "defined" practitioners to use all diagnostic and treatment techniques of acupuncture, oriental, traditional, and modern medical techniques for the prevention or correction of a malady, illness, injury , pain, or other conditions. **A Committee substitute deleted all contents of 3 legislative proposals (HB 158/160/243) and replaced them with a directive to study benefits and effects of complementary and alternative medicine. The Commission will be composed of various representatives including the Board of Medical Licensure, KMA, three medical schools and others. (Adopted)**

Nonconventional Medical Treatment

HB 243/SB 375

proposed creation of "Complementary or Nonconventional medical treatment" practitioners under the Board of Medical Licensure. The legislation redefined dishonorable and unethical conduct and character and limited the Board of Medical Licensure's ability to discipline alternative practitioners. The Board would have been prohibited from construing as an act of unprofessional conduct a physician's use of any conventional or nonconventional medical care with a reasonable expectation of efficacy in the treatment of human conditions, ailments, diseases, injuries, or infirmities.

MEDICAID

Regional Medicaid Partnerships

SB 305 delayed expansion of the Medicaid regional partnerships outside Regions 3 and 5 until 2000 and prohibited placing mental patients under managed care.

HB 178 exempted mentally retarded persons from Medicaid managed care.

HB 213 exempted developmentally disabled from Medicaid managed care.

HB 785 establishes a Medicaid Managed Care Oversight Advisory Committee to provide oversight on the implementation of Medicaid managed care including access, utilization, quality, and cost containment. **(Adopted)**

Mandatory Participation in Medicaid

HB 124 mandated participation in Medicaid, tied to medical license.

Abolish Medicaid Pre-authorization for Drugs

SB 351 directs that no prior authorization be required for reimbursement of claims involving drugs covered by Medicaid for a period of 12 months, during the time which the Drug Management Review Advisory Board may review the product. Safety and high cost measures are included which permit the Medicaid Department to withhold approval if necessary or appropriate. **(Adopted)**

HB 118 required the Administration to request a federal waiver to cover autism and pervasive developmental disorder under Medicaid.

Fraud and Abuse

HB 227 required physicians participating in the Medicaid Managed Care program to be potentially liable for a felony for "refusing to refer . . . a patient . . . when medically necessary." Such standards were so nebulous that in any instance where an inappropriate result occurred, a physician could be charged with a Class D felony. In other words, if an inappropriate result occurred . . . something medically necessary, ie, referral, did not occur; therefore the physician is guilty. HB 541 was subsequently introduced to correct deficiencies of HB 227, but never received a hearing.

Medicaid Coverage for Children 14-18 at 100% FPL (KCHIP)

SB 128 includes a provision calling for the Commonwealth to include all children from 14-18 under the Medicaid program. **(Adopted)**

KENTUCKY CHILD HEALTH INSURANCE PROGRAM (KCHIP)

Eligibility/Funding/Administration

SB 128 in accordance with the 1997 Federal Budget, authorizes KCHIP and funds the state program with matching money for a period of 10 years. Approximately 90,000 of 125,000 uninsured children will be eligible for this free or low cost program. Kentucky's 1998-99 budget funds KCHIP with $13 million which in turn will be matched by a $50 million federal subsidy. SB 128 directs KCHIP to be administered by the Department of Medicaid. Health coverage will be available for children under age 18 up to 200% of the FPL. Administration costs are limited to 10%, and a seven member advisory council will oversee the program. Health Departments are permitted to bid for services, and Managed Care Partnerships will be eligible to participate in the program. **(Adopted)**

KCHIP Schedule of Benefits:

Medicaid reimbursement schedules will be used under the program, except for those regions where Partnerships manage the program. Patients may obtain dental and vision care directly. Benefits will match either Blue Cross/Blue Shield federal employee program, state employees' mid-range plan, or a program promoted by the state's largest HMO. **(Adopted)**

ABORTION/MARRIAGE

Abortion

24 hour waiting period/info distribution

HB 85 requires women to wait 24 hours before obtaining an abortion after reviewing various pictures, drawings and other information. **(Adopted) (Vetoed) (Overridden)**

Partial Birth Abortion

SB 124 criminalizes the "partial birth abortion" procedure. **(Adopted)**

Licensing Standards for Abortion Facilities

SB 217 requires physician offices where abortions are performed to be licensed. **(Adopted)**

Marriage

HB 11 prohibited same sex marriage.

HB 13 renders same sex marriages occurring in foreign jurisdictions unenforceable in Kentucky. **(Adopted)**

HB 37 prohibits marriage of persons under 16. **(Adopted)**

HB 702 required statement on marriage license that domestic violence is illegal.

CERTIFICATE OF NEED

State Health Plan

SB 306 codified the State Health Plan which placed restrictions on physicians seeking exemptions from SHP via the Administrative Regulatory Review process.

Extend CON

SB 374 provides a six month extension for projects. **(Adopted)**

CON for Physician Offices

HB 922 Required physician office/clinic providing some surgical procedures to be licensed as an ambulatory surgery center.

OTHER MEDICAL ISSUES

Controlled Substance Abuse

HB 115 authorizes the development of a computer network of pharmacies, and a centralized network established through CHR. Eventually, pharmacists, physicians and other providers, by accessing the computer network, will be able to determine if a patient is a "doctor shopper" or an abuser of the system. Following a "date certain" prescriptions for controlled substances may only be written on secure "copy and erasure" proof paper. **(Adopted)**

Charitable Health Care Provider

HB 128 provides for charitable health care providers to render care within their scope of licensure. License granted under reciprocal agreements to an individual from another state/country is evidence of a Kentucky license. Budgets $20,000 for liability insurance that the state will provide. **(Adopted)**

Emergency Medical Services for Children (EMSC)

HB 249 establishes the EMSC to engage in data collection relating to child emergency medical services and trauma care. The Cabinet for Health Services will establish the Emergency Medical Services for Children Program. **(Adopted)**

Warranties for New Assistive Devices

HB 410 requires manufacturers of assistive devices to expressly warrant the device against any condition, defect, or malfunction which substantially impairs the use, value, or safety of the device for one year. Requires that only the manufacturer invoice price be refunded for hearing aids. **(Adopted)**

Breast Cancer Advisory Committee

HB 476 adds a radiologist fellowship trained in breast diagnostics to membership on the Breast Cancer Advisory Committee. **(Adopted)**

Living Will Expansion

HB 529 permits a person to use a living will to give all or any part of the body upon death for any purpose specified under KRS 311. 185. **(Adopted)**

Brain Injury Trust Fund

HB299 establishes the Brain Injury Trust Fund, funded by imposing fines on vehicle moving violations and DUI. **(Adopted)**

Osteopathy

SB 202 provides tuition to eligible Osteopathy Medical School students intending to practice in the Commonwealth. **(Adopted)**

Birth Surveillance Registry

SB 336 directs licensed free-standing birthing centers/general acute care hospitals give access to medical records to the Birth Surveillance Registry. **(Adopted)**

Confidentiality of Peer Review

SB 268/HB 711

includes in the definition those proceedings, records, opinions, conclusions, and recommendations made during a designated professional review function which are to be kept confidential and privileged, medical malpractice proceedings, actions arising out of review of credentials or of retrospective review, and actions by an applicant or grantee for staff privileges.

HEALTH INSURANCE

Autism

SB 63 requires health benefit plans to provide limited health coverage for autism for therapeutic respite and rehabilitative care. **(Adopted)**

Emergency Care

SB 227 requires health benefit plans to cover and reimburse expenses for emergency care without prior authorization in certain situations. **(Adopted)**

Cochlear Implants

SB 135 requires health benefit plans to cover cochlear implants. **(Adopted)**

Diabetes

HB 380 requires health benefit plans to cover diabetes. **(Adopted)**

Hearing Screening

HB 456 requires infant hearing screening before being discharged from hospitals and health benefit plans to provide insurance coverage. **(Adopted)**

Unfair Trade Practices/Provider Discounts

HB 457 establishes that it is an unfair trade practice if an insurer fails to compute an insured's coinsurance or cost sharing on the basis of the amount actually received by a health care provider from the insurer. **(Adopted)**

Cancer Drugs/Treatment

HB 618 requires all health benefit plans not to exclude coverage of cancer drugs when used for an indication other than one on its label if the drug is recognized for that indication in the official compendium or medical literature. Requires professional journal publications to meet specific criteria and include documentation regarding drug safety and effectiveness. Requires reimbursement if the drug has been prescribed for cancer patients and recognized as safe for cancer treatment. A panel of medical experts, nominated by the KMA, will be appointed by the Commissioner. **(Adopted)**

Women's Health Insurance

HB 864 requires health benefit plans to offer coverage for all stages of breast reconstruction surgery following a mastectomy that resulted from breast cancer if the insurer covers mastectomies; diagnosis and treatment of endometriosis and endometritis if the insurer covers hysterectomies; bone density testing for women age 35 and older, when indicated by the health provider. **(Adopted)**

NON MEDICAL ISSUES

Lethal Injection/Capital Punishment

HB 27 replaces electrocution as a form of capital punishment with lethal injections. Physicians are prohibited from participating in an execution except to certify death, and only after the condemned has been declared dead by another individual. **(Adopted)**

Annual Sessions

HB 246 a proposed constitutional amendment, permits the General Assembly to convene for 25 days in odd number years. **(Adopted)**

Administrative Regulations

HB 287 allows the public to more effectively participate in the regulatory process. HB 287 requires notice to interested parties, standards for deferral of regulations, more equitable consideration of oral and written comments, and additional public hearings if necessary. **(Adopted)**


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AWARDS NOMINATIONS

The KMA Awards Committee is accepting nominations for the two highest awards the Association presents. The Distinguished Service Award is presented annually to a member of the Association based on the following criteria:

- Contributions to organized medicine (including membership in county society, attendance of county and state meetings, service on committees, leadership as an officer, etc.)
- Individual medical service
- Community health, education and civic betterment
- Medical research

The nominee may qualify on any one or all combinations of these points. Reasons for the nominations should be clearly stated.

The Kentucky Medical Association Award is presented to an outstanding lay person in Kentucky each year in honor of his or her outstanding accomplishments in the field of public health and/or medical care.

The Awards Committee will have the responsibility to choose recipients of the KMA Distinguished Service Award and the Kentucky Medical Association Award. Any county society or individual member may suggest nominees to the committee.

The awards are presented at the President's Luncheon during the annual meeting.

AWARD NOMINATION FORM

Name: _____

Address: _____

Birth Date: _____ Place: _____

Marital Status: _____

Spouse's Name: _____

Children: _____

☐ Distinguished Service Award (Physician)

☐ KMA Award (Lay Person)

Education: _____

Military: _____

Membership in Professional Organizations: _____

Membership in Civic Organizations: _____

Honors and Awards: _____

(Describe nominees qualifications and other pertinent information which the Awards Committee may consider in making its decision.

Name of Person or Group Submitting Nomination: _____

Address: _____

Phone: (Home) _____

(Office) _____

Please fill in and mail to: KMA, Attn: Awards Committee, 4965 US Hwy 42, Ste 2000, Louisville, KY 40222-6301

Deadline for receivlng nominations is July 15.

Which Medical School Applicants Will Become Generalists or Rural-Based Physicians?

Stephen W. Looney, PhD; Richard D. Blondell, MD; Janice R. Gagel, MSN; Margaret W. Pentecost, MAT

The hypotheses that data, available at the time when a medical school admission decision is made, can be used to predict generalist specialty choice and rural practice location were tested. Applicant data, available to admissions committee members at the University of Louisville in 1986 and 1987 about the classes of 1990 and 1991 respectively, were correlated with specialty choice and practice location in a retrospective cohort study. Data collected from 1994 to 1996 about the 1990 and 1991 graduates were used to develop a mathematical model to predict specialty choice and practice location using stepwise logistic regression. These models were more accurate in predicting which applicants would not select a generalist career (negative predictive value = 80.7%) than those who would (positive predictive value = 42.7%) and in predicting those who would not practice in a rural location (negative predictive value = 91.9%) than those who would (positive predictive value = 37.8%). We conclude that applicant data, available at the time admission decisions are made, are of limited value for identifying those who will eventually become generalist physicians or practice in a rural area. However, the data are useful for identifying those who will not.

Kentucky has an adequate number of physicians for the total population, but still experiences shortages of generalist and rural-based physicians. Of the 120 counties in the Commonwealth, all of 49 counties and portions of another 27 are designated as Health Professional Shortage Areas for Primary Care.[1] Most of these counties are in rural areas. This problem is likely to continue into the future. From 1991 to 1993, the number of primary care physicians in Kentucky increased by only 14 (from 1269 to 1283) while the number of all other physicians increased by 1715 (from 5641 to 7356).[1] A similar situation exists across the nation which prompted the Association of American Medical Colleges (AAMC) to suggest that medical schools "adjust their admission criteria to increase the matriculation of qualified applicants who evince genuine interest in a generalist career."[2]

The selection of a career specialty is a complex and poorly understood process. Of the many factors that appear to influence specialty choice, only those features that are known to admissions committee members can be used to help make decisions about whether or not to admit a given individual to medical school. Bland and her colleagues analyzed 307 references about specialty choice published between 1987 and 1993.[3,4] This analysis identified only a few characteristics, present at the time of admission to medical school, that appear to be associated with a generalist career choice: being female, older, and married; having a broad undergraduate background; and having non-physician parents. Blue and her colleagues at the University of Kentucky found that future generalists often make their career decision before entering medical school, but note that student-expressed interest in a generalist career is not used as an admission criterion at their institution.[5]

It has been known for decades that medical students from rural areas are more likely to eventually practice in rural areas than are students from urban areas and vice versa.[6] Recent studies continue to confirm this.[7,8] Elam and her colleagues found that medical school graduates of the University of Kentucky tended to return to their in-state district of origin to practice and that men were more likely than women to locate their practice in a rural area.[9]

Is it possible for admissions committee members in Kentucky to identify which applicants

From the University of Louisville Department of Family and Community Medicine. Drs Looney and Blondell are Professors; Ms Gogel is a Medical Student; and Ms Pentecost is a Curriculum Coordinator.

This study was supported, in part, by the University of Louisville School of Medicine Research Committee. A report of the initial data collection was presented at the 1995 Resident/Student Research Forum of the American Academy of Family Physicians on July 29, 1995, in Kansas City, MO.

who are not only qualified to become successful medical students and competent physicians, but are also likely to become generalist physicians and/or practice in rural areas? Committee members must consider a large amount of applicant data before rendering a decision about who is admitted to medical school: demographics (age, gender, race, marital status, hometowns, etc); educational background (college major, grades, aptitude test scores, etc); and interview scores concerning personality, motivation, career goals, and so forth. At the University of Louisville, admissions committee members pay particular attention to applicants who participated in the Professional Education Preparation Program (PEPP), a statewide program designed to increase the likelihood that qualified rural students will apply to and be accepted by the state's health profession schools.

We hypothesize that there are factors, known at the time individuals apply to the University of Louisville School of Medicine, which are predictive of specialty choice and practice location. Furthermore, we hypothesize that mathematical models could be developed that can be used to estimate the probability at the time of admission that a given individual will choose a generalist career specialty or rural practice location.

Methods

Individuals who graduated in 1990 and 1991 from the University of Louisville School of Medicine were studied. These classes were selected because they were the most recent group to have chosen a career specialty, completed residency training and selected a practice location at the time of the initial data collection during the summer of 1994. Information that could not be obtained during the summer of 1994 was added to the database as it became available during the two years that followed.

Information available to the admissions committee when the subjects applied to medical school in 1986 and 1987 was obtained from the original application materials and included: demographic information (age, race, gender, marital status, number of children, parental occupation); hometown (rural, urban, PEPP county, other); whether or not the American Medical College Application Service (AMCAS) designated the subject as "rural"; participation in the PEPP; type (private, public) and location (in-state, out-of-state) of the subject's undergraduate school; undergraduate major (science, health care [eg, nursing, pharmacy], non-science); undergraduate Grade Point Average (GPA) in all courses and the GPA in science courses; graduate GPA, if applicable; scores for the sections of the version of the Medical College Aptitude Test (MCAT) in use in 1986 and 1987 (reading, biology, chemistry, physics, quantitative, and science problems); a score for the recommendation of the pre-medical (pre-med) college faculty; scores from the medical school interview; and whether or not this was the individual's second application to medical school. These data fields were selected based on reviews of the published studies on this subject.[2,3,6]

The undergraduate GPA and the GPA in science courses were obtained from the AMCAS summary form. The graduate GPA was calculated from the subject's course transcripts by officials in the admission office who also assigned a value (based on a 10-point Likert scale) to the pre-medical college recommendation. The subject's community at the time of high school graduation was used to determine the "hometown" and was considered to be "rural" if it had a population of less than 25,000 and was not located in a Bureau of the Census Metropolitan Statistical Area (MSA), and "urban" if within an MSA. Hometowns not satisfying the definition of rural or urban were classified as "other." Applicant interview scores rating various personality characteristics (scales I, II, III, IV, and overall) were based on a 6-point Likert scale.

These admissions data were correlated with the collected outcome data: academic difficulty (ie, course failures or repetition, failure on either part I or II of the National Board examination, and failure to complete medical school on schedule); specialty choice; and practice location. An attempt was made to contact all of the medical school graduates by telephone to confirm career specialty choice and practice location. Generalists were considered to be those practicing family practice, general internal medicine, general pediatrics, or medicine/pediatrics. The same definitions used for "rural," "urban," and "other" hometowns were also used to categorize practice location.

The Cochran-Mantel-Haenszel[10] method was used to test the statistical significance of and find a 95% confidence interval for the likelihood — referred to as "relative risk" in the terminology of statistics — of eventually choosing a generalist specialty or practicing in a rural area for each of the applicants' categorical characteristics (age, gender, marital status, etc) which were known at the time of application. The unequal variance

t-test[11] was used to compare the continuous characteristics (MCAT scores, GPA, interview ratings, etc) of those medical school graduates who chose a generalist specialty or a rural practice location with those who did not. All statistical tests were two-tailed. The Statistical Analysis System (SAS Institute, Inc, Cary, North Carolina, 1989) was used to perform all the calculations of this study.

Stepwise logistic regression[12] was used to select the combination of variables which best predicted generalist specialty choice and rural practice location. The "goodness-of-fit" of the resulting logistic models was assessed using the "score test."[12] The sensitivity, specificity, and predictive value of the prediction rules were estimated using a "jackknife" procedure in order to reduce the bias that results from classifying the same data used to construct the prediction rules.[13]

Results

Of the 234 graduates (120 from 1990 and 114 from 1991), 20 were lost to follow-up, leaving 214 subjects for analysis. There were 64 graduates (30%) who were practicing generalists, and 150 (70%) were either in a non-generalist practice or in the process of completing a non-generalist residency or fellowship. Of these same 214 subjects, 24 (11%) were practicing in a rural location, 113 (53%) were practicing in a non-rural location, and 77 (36%) were either still in postgraduate training (N = 66) or had not yet established a definite practice location (N = 11). Of the 214 subjects, only those for whom the data sets were complete were used to develop the prediction models, 210 for the generalist model and 206 for the rural practice model.

Table 1 summarizes the analyses of the characteristics significantly associated with the selection of a generalist specialty by the 214 subjects. Age, gender, race, marital status, hometown, and the GPAs did not correlate with a generalist specialty choice. Although those who selected a generalist specialty had lower mean scores for four of the six sections of the MCAT, they were no more likely to experience academic difficulty than the others.

Table 2 summarizes the analyses of the characteristics significantly associated with the selection of a rural practice location by the 214 subjects. Practice location did not correlate with age, gender, race, marital status, type or location of the undergraduate college, nor the GPAs. Those who selected a rural practice location were no more likely to experience academic difficulty than those who did not.

Table 1. Predictors of Generolist Speciolty Choice

Predictor[1]	P-Volue	Relative Risk	95% Confidence Intervol
MCAT[2]: Science Problems (−)	0.008	N/A[3]	N/A
MCAT: Physics (−)	0.009	N/A	N/A
MCAT: Quantitative (−)	0.016	N/A	N/A
MCAT: Chemistry (−)	0.036	N/A	N/A
Privote, out-of-stote undergroduote educotion (−)	0.046	0.50	0.25-0.99
Undergroduote heolthcore mojor (+)	0.048	2.57	1.01-6.56

[1]A plus sign (+) indicotes o direct relotionship with generolist speciolty choice, ond o negative sign (−) indicotes on inverse relotionship.
[2]Medicol College Aptitude Test.
[3]Not Applicoble for continuous characteristics.

Table 2. Predictors of Rurol Proctice Location

Predictor[1]	P-Value	Relotive Risk	95% Confidence Intervol
Urbon hometown In Kentucky (−)	<0.001	0.24	0.11 to 0.52
Rurol AMCAS[2] (+)	0.001	3.28	1.65 to 6.53
In-stote rurol hometown (+)	0.010	2.54	1.25 to 5.14
Undergroduote heolth core mojor (+)	0.025	4.03	1.19 to 13.62
Hometown in PEPP[3] county (+)	0.027	2.41	1.11 to 5.24
Out-of-state urbon hometown (+)	0.034	3.10	1.09 to 8.80
Fother, other heolth core profession (+)[4]	0.037	2.51	1.06 to 5.97
Interview roting: overall (+)	0.049	N/A[5]	N/A

[1]A plus sign (+) indicates a positive ossociotion with rurol location, and a negative sign (−) indicates negotive ossociotion.
[2]Americon Medicol College Applicotion Service.
[3]Professionol Educotion Preporotion Progrom.
[4]Heolth core profession other thon physicion.
[5]Not Applicoble for continuous chorocteristics.

The predictors that were retained in the stepwise logistic regression analysis for the model to predict generalist specialty choice are listed in order of importance. A plus sign (+) indicates a positive association, and a negative sign (−) indicates a negative association. They were: quantitative MCAT score (−); reading MCAT score (+); graduate of a public out-of-state undergraduate school (+); graduate of a public undergraduate school in Kentucky (+); biology MCAT score (−); undergraduate health care degree (+); second application (−). For rural practice location, the following predictors were retained: instate urban hometown (−); quantitative MCAT score (+); non-rural, non-urban in-state hometown (−), and pre-

med score (−). The "score test" indicates an adequate fit of both the generalist specialty and rural location models to the data ($p = 0.001$ and $p < 0.001$ respectively).

The classification results for the logistic regression prediction models for generalist specialty selection and rural practice location are summarized in Table 3. The generalist specialty prediction rule accurately classifies the majority (63.3%) of the 210 graduates for whom a career specialty was known and for whom a complete data set was obtained. The rural practice prediction rule also accurately classifies a majority (73.3%) of the 131 graduates available for analysis (61% of the total), the remainder either were still in training or had not yet selected a practice location.

Table 3. Classification Accuracy of Predictive Models Based on Logistic Regression

Characteristic	Generalist Practice Choice	Rural Location
Accuracy	63.3% (133/210 correct)	73.3% (96/131 correct)
Sensitivity	65.1% (41/63 correct)	70.8% (17/24 correct)
Specificity	62.6% (92/147 correct)	73.8% (79/107 correct)
Predictive Value Positive	42.7% (41/96 correct)	37.8% (17/45 correct)
Predictive Value Negative	80.7% (92/114 correct)	91.9% (79/86 correct)

Conclusions

We conclude that certain applicant characteristics are predictive of the selection of a generalist specialty and rural practice location, but we were not always able to reproduce the findings of others. For example, gender, age, and marital status have been identified by others as significant, but did not correlate with a generalist specialty choice in our study population. We did appear to confirm the affinity model of practice location: graduates who were from a rural hometown were more likely to return to a rural area to practice than were graduates who were from an urban hometown in Kentucky. However, we found that graduates who were from an out-of-state urban hometown were more likely to select a rural practice location than the others. Perhaps these urban students had a preexisting interest in rural health care and were attracted to the rural nature of Kentucky for their medical education or were influenced by the required rural experiences at the University of Louisville.

The predictive values of the generalist specialty and rural practice prediction rules were better for determining who would *not* be a generalist or establish a rural practice than for determining who would. This is consistent with the conclusions of Bland that students who enter medical school with a preference for primary care may have this preference diminish with time particularly during the clinical years.[3,4] The cultures of medical schools tend to socialize students toward specialty careers and urban practice locations.

These prediction models can be used by admissions committee members to help the University of Louisville School of Medicine reach the goal of having 50% of its graduates select a generalist career and having more of its graduates practice in rural locations. Although the models are weak predictors of generalist specialty choice and rural practice location, these models can be used to limit the number of matriculants who are not likely to select a generalist career or practice in a rural area. However, admission policies alone cannot accomplish the goals of the School. For example, based on the results of this study, to produce a class in which half the graduates would select a career as a generalist, the admissions committee would need to exclude every applicant who was likely to choose a non-generalist career. Since this is not likely to occur, other efforts must be used to compliment admission policies designed to increase the number of graduates who choose generalist career or rural practice locations. These efforts include: (1) recruiting individuals more likely to become generalists or rural physicians than the current pool of applicants; (2) attempting to limit the attrition of future generalists during medical school and residency; and (3) supporting generalist and rural physicians in practice.

It has been suggested that new models should be developed that might better predict an applicant's future.[9] These models would be based on other factors that are known to be associated with a generalist career choice or rural location selection: income expectations, lifestyle preferences, the need for prestige, and so forth.[14,15] However, it is not clear that an admissions committee could actually collect this kind of information and use it in a systematic way to make admission decisions. For example, if either gender or income expectations were found to be an important factor, would it then be appropriate to use it for a decision about the admission of a given applicant? Using demographic data (eg, gender) as admission

criteria may conflict with the principles of equal-protection and due-process.[16]

Any medical school that uses admission policies to achieve goals for its graduates should validate its policies through studies of its own matriculates. Our study supports this assertion, since applicant characteristics associated with the graduates' specialty choice identified by other researchers in other states were not confirmed by this study. Likewise our data may not be relevant to other institutions, but they could use our study methods and modeling approach to develop prediction rules that would be valid for their medical school's applicant pool. Establishing the degree of predictive validity of any intervention, scare in medical education research, is essential if improvements in health care education research are to be realized.[17]

References

1. 1996-1998 State Health Plan. Kentucky Health Policy Board. Frankfort, Kentucky, 1995.
2. Greer DS, Bhak KN, Zenker BM. Comments on the AAMC policy statement recommending strategies for increasing the production of generalists. *Acad Med.* 1995;70:620-641.
3. Bland CJ, Meurer LN, Maldonado G. Determinants of primary care specialty choice: a non-statistical meta-analysis of the literature. *Acad Med.* 1995;70:620-641.
4. Bland CJ, Meurer LN, Maldonado G. Determinants of primary care specialty choice. Rockville, Maryland: Division of Medicine, Bureau of Health Professions, Health Resources and Services Administration, Department of Health and Human Services, Public Health Service, 1994 (NTIS #PB95184776.)
5. Blue AV, Donnelly MB, Harrell-Parr P, Murphy-Spencer A, Rubeck RF, Jarecky RK. Developing generalists for Kentucky. *J Ky Med Assoc.* 1996;94:439-445.
6. Ernst RL, Yett DE. Physician location and specialty choice. Ann Arbor: Health Administration Press 1985.
7. Costa AJ, Schrop SL, McCord G, Gillanders WR. To stay or not to stay: factors influencing family practice residents' choice of initial practice location. *Fam Med.* 1996;28:214-219.
8. Fryer GE, Stine C, Vojir C, Miller M. Predictors and profiles of rural versus urban family practice. *Fam Med.* 1997;29:115-118.
9. Elam CL, Rosenbaum ME, Johnson MMS. Geographic origin and its impact on practice location in Kentucky. *J Ky Med Assoc.* 1996;94:446-450.
10. Kleinbaum DG, Kupper LL, Morgenstern H. Epidemiologic research: principle and qualitative methods. New York: Van Nostrand Reinhold, 1982.
11. Moser BK, Stevens GR. Homogeneity of variance in the two-sample means test. *Amer Statis.* 1992;46:19-21.
12. Hosmer DW, Lemeshow S. *Applied logistic regression.* New York: John Wiley & Sons, 1989.
13. Miller RG. The jackknife: a review. *Biometrika.* 1974;61:1-15.
14. Fincher RE, Lewis LA, Rogers LQ. Classification model that predicts medical students' choices of primary care of non-primary care specialties. *Acad Med.* 1992;67:324-327.
15. Rosenthal MP, Turner TN, Diamond J, Rabinowitz HK. Income expectations of first-year students at Jefferson Medical College as a predictor of family practice specialty choice. *Acad Med.* 1992;67:328-331.
16. Nowacek G, Saches L. Demographic variables in medical school admission. *Acad Med.* 1990;65:140-144.
17. Renger R, Meadows LM. Testing for predictive validity in health care education research: a critical review. *Acad Med.* 1994;69:685-687.

A Disturbing Trend

"Healthcare by its nature is not a mere commodity. . . . Healthcare is fundamentally different from most other goods because it is essential to human dignity and the character of our communities."

— The late Cardinal Joseph Bernadin

"Mounting shadows darken our calling and threaten to transform healing from a covenant into a business contract."

— Committee to Defend Healthcare

Terry held the defibrillator paddles to the patient's chest and once again shocked him with 360 Joules of electricity. Still his heart rhythm remained ventricular fibrillation. His blood pressure was not detectable. Peggy had talked with the attending physician and he agreed that despite all that we had done there was no hope that the patient would survive. We stopped the code blue and shortly thereafter pronounced the patient dead at 2:45 AM on Christmas Day 1982.

We were exhausted but there was no time to sleep. The medicine service at Christ Hospital was quite busy that night. That Christmas Day Terry was the intern on call for the medical ICU and Peggy was the chief medical resident on call for the entire hospital. We would never have worked such long, stressful hours just for money, but the non-material rewards of caring for the sick have always made us proud to call ourselves physicians.

A couple of years after that memorable Christmas Day, we finished our residency, got married and have been practicing this respected profession in the Cincinnati area ever since. Currently we are in the practice of Internal Medicine in Covington, Ky.

Over the past few years we have noted a disturbing trend in this business of caring for the sick of our community. For-profit or market-driven healthcare is very quickly becoming a major controller of healthcare delivered throughout our community and across our country. We feel that this trend not only threatens the integrity of our profession but more importantly threatens the entire system of healthcare provided to our communities.

The past few years have witnessed remarkable growth in for-profit healthcare. Yet despite a booming economy and low unemployment rates, we have also witnessed an increase in the number of uninsured Americans, up to 41.7 million people. This revolution in healthcare has been a quiet one. We feel that the large majority of the public does not realize most of these changes and certainly don't understand their significance.

The purpose of writing this letter and the purpose of a recent publication in the *Journal of the American Medical Association (JAMA)* is to call attention to this major disturbing trend in healthcare. The *JAMA* article was written by a group of physicians and nurses based in Boston, Massachusetts, and articulates some of our concerns. The following are several quotes from this thoughtful publication:

". . . The shift to profit-driven care is at a gallop."

". . . For the public who are mostly healthy and use little care, awareness of the degradation of medicine builds slowly."

". . . Market medicine treats patients as profit centers."

". . . Listening, learning, and caring give way to deal-making, managing, and marketing."

". . . Public resources of enormous worth—non-profit hospitals—built over decades by charity, devoted volunteers and taxes are being taken over by companies responsive to Wall Street and indifferent to Main Street."

". . . The Committee to Defend Healthcare wishes to call attention to the deterioration of care and caring and initiate a colloquy on a future healthcare guided by science and compassion rather than greed."

Christmas Day 1997 we were again on call together. Peggy made rounds at St. Elizabeth South and Terry made rounds at St. Elizabeth North. Thankfully this call day was not nearly as stressful as that Christmas in 1982 spent at Christ Hospital. In 1982 we would often have trouble sleeping at night wondering when the next code blue would be called. Now we still have worried nights concerned about our patients. But now we have the added burden of worrying about our entire healthcare system. We believe now is the time to call a code blue on our current healthcare system. The powers of the marketplace and for-profit medicine may seem like formidable and insurmountable foes but we must rise to the challenge to improve the healthcare delivered to our communities.

We didn't stay awake for 36 hours taking care of sick people Christmas 1982 for the money. We didn't work Christmas Day 1997 just for the money.

The purpose of the practice of medicine is not making the most money for stockholders.

Our hope for our patient in 1982 was that he would wake up to enjoy a better health status. Our hope for 1998 is that our society, our legislators and our profession wake up and act now to "create a healthcare system based on science and compassion rather than greed."

Peggy J. McDannold, MD
Terry A. McDannold, MD

The Drugstore

"I must admit that considerable good can be accomplished by these compulsory pharmacy consultations but much bad material has to be rejected to reach the smaller amount of good that should be adopted."

My office has a party every week that cleans the tortured souls of the party goers and gives the happy energy we need to go forth and solve real problems, relieve the suffering of real patients and go home with a sense of having accomplished a little good. At our party we take an unknowing victim and macerate his persona beyond recognition, throw his remains to the wolves and watch the wolves gleefully satiate themselves. We call our party

Time for Pharmacy Review

We start with the pharmacist's recommendation, like change a calcium channel blocker to an ACE inhibitor. Then we go to the rationale: for "cost effectiveness." This is so irrational it should be embarrassing to the pharmacist.

There is the recommendation to change a medicine the patient has taken successfully for six months for "safety profile." Since the patient's profile has remained safe for six months, this might be a good reason not to change the medicine.

There is the continual urge to decrease psychoactive medicines and this is a very proper thing to try to do but the opinion of nursing must be sought and respected and serious efforts made not to harm the patient by mindless manipulation of medicines.

In the final analysis I must admit that considerable good can be accomplished by these compulsory pharmacy consultations but much bad material has to be rejected to reach the smaller amount of good that should be adopted. The intelligent participation by nursing is essential to reach recommendations for improvement.

So, we thank the pharmacist for his constructive criticism without telling him he is the life of our pharmacy review parties.

A. Evan Overstreet, MD
Editor

Jan Crase
KMAA President 1998-99

Stir What Ya Got!

Following is the Inaugural Address presented April 21, 1998, by Jan Crase, Somerset, as she assumed the Presidency of the Kentucky Medical Association Alliance.

I'll try not to be like the politician making a speech who got a bit carried away, as so many of them do, and spoke for two hours. Finally, he realized what he was doing and said, "I'm sorry I talked so long, I left my watch at home." A voice from the back of the room yelled, "There's a calendar behind you." — Yes, I do have my watch.

It is a pleasure to be here with you. I appreciate so very much all the wonderful support, encouragement, and especially all the kindness you have shown to me.

Physicians are caring people — Physician spouses are caring people — How important is it to care for others?

Angie DeWeese tells a story about the great anthropologist Margaret Mead who dedicated her life to studying ancient cultures. One day a student asked her for the very earliest sign of civilization in *any* given culture. He expected the answer to be a clay pot, or perhaps a fishhook, or a stone for grinding grain. Her answer was, "A healed femur." She explained that no healed femurs are found among savages. You will find skulls crushed by clubs, and temples pierced by arrows, but no healed femurs are found where the law of the jungle, survival of the fittest, reigns. A healed femur shows that someone had to show compassion. Someone had to care for that person with the broken leg while it healed. Someone had to do that injured person's hunting and bring him or her food until that leg healed; therefore the **first sign of civilization** is caring for others. — Nothing happens until someone cares!

We are all privileged to be a part of such a caring profession and such a caring organization. Let me share with you my own personal story about the care and concern of this organization.

Many years ago when my husband graduated from medical school and we moved to Wichita, Kansas, where I didn't know a soul, it was the medical auxiliary who welcomed me and helped me to acclimate to that community, so much so I didn't want to leave. When we moved to Berea, Kentucky, the medical auxiliary was there for me and helped me get involved in community projects right away. Then, when Jim was drafted into the Navy and we moved to Norfolk, Virginia, where, again, I didn't know a soul — you guessed it, the Navy medical auxiliary welcomed me with open arms and again helped me acclimate to a whole new way of life. When moving to Somerset, Kentucky, the medical auxiliary was there again to support me and help me to adjust and get involved in the community. I have learned that medical spouses are involved in everything worthwhile in the community. If at least one of them is not involved in an organization, then don't bother. The auxiliary or alliance as it is called today has been there for me all my married life. It has been a base of support, a supply of friends, and a most caring organization.

You people understand where I'm coming from and what I'm experiencing. You understand phones ringing all night, spouses being up all night going back and forth to the hospital, worrying about a patient. You understand lots of time alone,

late dinners, and going to social events alone. You understand it all because you have been there and done that. My agreeing to serve as your president is a very small way of giving back to the organization that has given so very much to me.

I enter upon my duties as president, however, with a sense of humility. I am, for a short period of time, to be captain of a ship in which every member of the crew is capable of being captain.

Most presidents use some theme or motto for their year of service. Most of these themes sound ideal or imply high goals. Well, mine does not imply either — but somehow I think it fits. It comes from a story about a College President and *Bible* teacher, who while returning home late one night had stopped at a roadside diner in a Texas hill country town to get a quick cup of coffee. Being accustomed to using large amounts of sugar in his coffee, he quickly used all the sugar packets the waitress had left on the table for him, but wanted more. As the waitress came near his table again, he called out, "I want some more sugar, please." The crusty old gal defiantly put her hands on her hips, leaned over toward him and snapped, "Why don't ya stir what ya got!"

When you feel there is a scarcity of sugar or whatever in your life, "Why don't ya stir what ya got." I thought that could be a good slogan for us.

Theodore Roosevelt said, "Do what you can/with what you have/where you are." In other words — stir what ya got!

Doctors are under tremendous stress and being attacked from numerous directions. We all know this stress is not staying in the office, it's going home with the physician and is affecting spouses and families. Both physicians and patients are experiencing more and more frustration as they encounter scarcity and choices. So what are we going to do? How are we going to "stir what we got?" What is our most valuable possession?

What about the fact that we have each other? After all, we're all in this together. We are all a part of this family of medicine. Physicians need support, and we all need each other. There are many divisive forces out there. The old theory of divide and conquer is alive and well and being used by more than one group against the physician. Also there is much adversity and uncertainty in the profession itself. Therefore, it is all the more important that physicians put aside their differences and spouses put aside their differences and all work together to protect physician and patient choices, thereby protecting quality medical care. United we can stand, divided we shall surely fall. Can the Alliance be the glue that helps hold the family of medicine together?

Whatever happens to medicine, happens to you the spouse. Medicine's image, positive or negative, affects you the spouse. High liability insurance rates and adverse medical legislation affect you the spouse. The quality of medical care affects you the spouse. I've heard doctors' spouses say, "I don't want to join the Alliance — it's too much like a ladies' aid society — besides I want my own identity." Well, to those I say, "First of all, when you married a physician you added the identity of being a physician's spouse; whether you like it or not, that came with the package. You can have any other identity you wish, but as long as you are married to a physician, you will also be known as a physician spouse so you might as well join the spouse's organization and get to know others who understand where you are coming from, and who share your unique experiences and problems. Besides, it's an extremely worthwhile organization doing great things for the community, the state, and the nation."

In addition to the warm cozy feeling and support given to us members, the Alliance always looks to the advancement of health and education. It has a long and rich history of 75 years. It was organized in Kentucky in 1923 in Crab Orchard. Over the years this organization publicized multiple public health hazards, fought for better access to health care, distributed information about teen pregnancy, assisted in public vaccination and school health programs, raised funds for medical research and education, and has been active in the political arena.

Today, the Alliance still looks to the advancement of health and education. Its activities fall into four main categories — *AMA/ERF, Health Promotions, Legislative, and Membership.*

AMA/ERF: Kentucky has a rich history of supporting the AMA Education Research Foundation, and hopefully this year we can endow an Alliance scholarship with these funds at both U of L and U of K medical schools.

HEALTH PROMOTIONS: I'll briefly touch on three health projects to be addressed this year.

#1. The Alliance has been involved in many health promotions over the years, but none more significant than SAVE, which stands for "Stop America's Violence Everywhere." This is a nationwide effort of physicians' spouses to combat violence through a wide range of grassroots initiatives. Why is there a need for SAVE?

1. Violence is today's number one health crisis.
2. Violence is one of the most profound yet preventable health epidemics of our time.

3. Violence has replaced disease as the number one killer of children.

Yet, violence is a **chosen** behavior.

A united effort with lots of support accomplishes much more than a single effort. Joining hands and working together with the schools, the government, other non profit organizations and businesses, we **can** Stop America's Violence Everywhere. Shall we carry this program forward in Kentucky this year?

#2. Did you know that according to the September 1993 issue of *American Journal of Public Health*, teachers have a 60% higher mortality from breast cancer than any other professional group? I think we have found a way to reach 45,000 Kentucky teachers plus 40,000 school staff and remind them to get their mammograms. Stay tuned.

#3. Smoking. We're all aware of the health hazards of smoking and the importance of **early** prevention. Please take a look at the SMART program this year and see if you would like to use this in your county.

I think we would agree that **all** these health promotion projects are extremely worthwhile.

LEGISLATIVE: As most of you know, I am especially interested in the legislative process and I encourage you to be involved also. After all, medicine and politics are a family affair. For every law that is passed, there are winners and there are losers. In the political arena you have a choice. You are either a participant or you are a victim. Unfortunately there is no category of spectator. Power does not reside in the profession. It resides with those who take it. What about a political workshop with a "Back to Basics" training? You can't fight a war without an army. Physicians and Alliance soldiers need to receive basic training for combat readiness. Are you ready to "stir what ya got" and accept the responsibility of power?

MEMBERSHIP: Membership is always a challenge in any organization; however, special challenges are facing this one. First of all, about 40% of the medical students today are female, and their male spouses, thus far, are not inclined to join this organization. What can be done about this? Also, in the USA the average length of marriage before divorce is 7 years and married physicians have a 10-20% higher divorce rate than that of the general population. Some states are looking at allowing divorced members to remain on as members. Is this something to consider in the future? Anyway, one of the most successful *techniques* for getting new members seems to be personal contact where each member invites a non-member to join. Tell your own personal story of why you joined the Alliance and what the Alliance means to you. Please, **take the time** to invite a non-member to join. I challenge you to be innovative and increase membership in your own county and help organize at least one other adjoining county.

This organization has tremendous potential and talent. The Alliance is one of the most highly organized and involved health organizations in local communities, the state of Kentucky, and the Nation. When joining efforts with the Medical Association, the potential is awesome; however, potential doesn't amount to a hill of beans if it is not exercised. Will Rogers said, "Even if you're on the right track, you'll get run over if you just sit there." Why not get up and "stir what ya got?"

In today's world of TV and mass media, perception seems to be reality. Doctors' images have been tarnished as a result of perception; therefore, we all need to be more aware of the importance of good public relations.

The special strengths of the Alliance are in public relations and the legislative arena. These tools are extremely valuable to physicians today, so why not work together. There is power in partnership. Besides, it is more fun working together.

Of all the virtues we can learn, one trait is most useful, most essential for survival, and most likely to improve the quality of life — that is **the ability to transform adversity into an enjoyable challenge.** Let's care enough to carve these stumbling blocks into stepping stones. Never doubt that a small number of committed people can change the world — in fact, it is the only thing that can. In other words, "Why don't we stir what we got!"

Jan Crase
KMAA President

Harry W. Carloss, MD Nominated for KMA President-Elect

Harry W. Carloss, MD, has been nominated for the office of President-Elect of the Kentucky Medical Association.

An internist practicing in Paducah, Dr Carloss served as 1st District KMA Delegate for 13 years, from 1985 to 1997; five years as a Trustee, 1992-96; Vice Chair of the Board of Trustees in 1994-95; and Chair of the Board of Trustees in 1995-97. In 1997 he was elected to a one-year term as Vice President. He has served continuously on the KEMPAC Board since 1992. Other current commitments to KMA include service on the Public Education, Professional Liability, Legislative Quick Action, and Cancer Committees, as well as the Physician Advisory Committee to Health Kentucky.

In addition to membership in numerous professional associations, Dr Carloss is a fellow of the American College of Physicians and the Royal Society of Medicine. He is an Associate Clinical Professor of Medicine at the University of Louisville and an Assistant Professor of Internal Medicine at the University of Kentucky.

Dr Carloss is deeply committed and devotes many hours to cancer research, cancer treatment, and Hospice endeavors.

Born in Lexington, Kentucky, Dr Carloss received an undergraduate degree from the University of Kentucky in 1971 and a medical degree from the University of Louisville School of Medicine in 1975. Following an internship and residency at the University of Louisville, he completed a two-year fellowship at Scripps Clinic and Research Foundation, Division of Hematology/Oncology, one year of which he served as Chief Hematology Fellow and Chief Fellow.

Dr Carloss and his wife Barbara have two daughters and one son.

PEOPLE

Sam A. Labib, MD, Whitesburg, was inducted as a fellow of the American Academy of Orthopaedic Surgeons during ceremonies at the Academy's 65th annual meeting in New Orleans. Dr Labib was one of 648 new fellows inducted. With 17,000 active members, the Academy is the largest medical association for musculoskeletal specialists. Its members have completed medical school plus at least 5 years of specialty study in orthopaedics in an accredited residency program, passed a comprehensive oral and written exam, and been certified by the American Board of Orthopaedic Surgery.

Leah J. Dickstein, MD, recently was honored as one of five Louisville-area Women of Distinction for 1998. Dr Dickstein has an international reputation as a physician, psychiatrist, and educator. She grew up in Brooklyn, NY, and met her future husband, **Dr Herbert Dickstein,** while they were in college there. While he was in medical school in Belgium she worked to support them, at one time juggling seven part-time jobs. She took Flemish-language courses in psychiatry and criminology and, after her husband's graduation, became a teacher — first in Belgium, then at an inner-city elementary school in Brooklyn.

In 1966 Dickstein was admitted to the University of Louisville School of Medicine, and remained in Louisville as a physician and teacher. The problem of domestic violence has occupied much of her attention, and she developed a curriculum on sexual harassment, conducting workshops nationally and with all 19 departments at the medical school. She instructs junior medical students on domestic violence, has edited a book on the issue, and serves on the National Advisory Council on Family Violence.

Dr Dickstein is a prolific writer. She is currently finishing four books, including one based on a health-awareness workshop she has conducted for 17 years, and one on the history of women physicians in Kentucky. She also is working on a study of survivors of German concentration camps in World War II.

Allan Tasman, MD, Chairman of the University of Louisville Department of Psychiatry and Behavioral Sciences, has been elected by a wide margin to a term as President-Elect of the American Psychiatric Association beginning in June 1998. He will assume the office of President of the Association in May 1999. The American Psychiatric Association, founded in 1844, is the oldest medical specialty society in the United States. With more than 40,000 members, the APA is the largest organization of psychiatrists in the world.

Dr Tasman's activities with the American Psychiatric Association have spanned 20 years. He is presently completing a two-year term as Vice President. From 1988 to 1992 he chaired the APA's Scientific Program Committee, where he had responsibility for coordinating the entire scientific content of the association's annual meetings. He also has been a member of the APA's Council on Medical Education and Career Development.

A Louisville native and 1973 graduate of the University of Kentucky College of Medicine, Dr Tasman has had a longstanding commitment to excellence in clinical care. He is a graduate of the Western New England Institute for Psychoanalysis in New Haven, Connecticut. Training in psychoanalysis, a specialized form of psychotherapy, requires a lengthy program of course work and supervised clinical work following psychiatric residency. His research, supported by a number of grants over the last 15 years, has focused on the neurophysiology of cognitive process, especially related to alcoholism.

Dr Tasman also is serving in his second term as the President of the American Association of Chairs of Departments of Psychiatry. He is also a past president of the American Association of Directors of Psychiatric Residency Training and of the Association for Academic Psychiatry. Dr Tasman is the only individual in the history of these major academic psychiatry organizations to serve as president of all three.

Dr Tasman is the Deputy Editor of *The Journal of Psychotherapy Practice and Research,* and has been the editor or co-editor of 16 psychiatric textbooks. He is the senior editor of a new comprehensive textbook of psychiatry, entitled *Psychiatry,* published in January 1997. The *New England Journal of Medicine*, in an August 28, 1997 review, called it "the best current textbook of psychiatry."

UPDATES

Parke-Davis and Pfizer, Inc Provide LIPITOR for Health Kentucky

The Parke-Davis division of Warner Lambert Company and Pfizer, Inc will provide LIPITOR® (atorvastatin calcium) tablets free of charge to Kentuckians who live below the federal poverty standards and have no public or private insurance, **Donald C. Barton, MD,** president of Health

Kentucky, Inc, announced recently at a Health Kentucky Board of Directors' meeting.

The free pharmaceuticals are part of a unique voluntary effort by Health Kentucky, Inc to provide low-income Kentuckians access to quality health care. Originally offering physician and hospital services, the program has expanded since its inception in 1984 to include pharmaceutical, dental, hospice, and home health services. Throughout the state more than 1,900 physicians, 500 pharmacies, 150 dentists, every acute care hospital, and 5 pharmaceutical companies volunteer their services to this "safety net" program. Approximately 300,000 Kentuckians are potentially eligible for the services.

Parke-Davis and Pfizer, Inc will provide LIPITOR®, their cholesterol lowering medication, to those patients who qualify for the program. LIPITOR® was discovered and developed by the Parke-Davis Research Division of Warner-Lambert. Parke-Davis and Pfizer, Inc are collaborating on clinical, marketing, and sales support for the product in the US, and broadly in key international markets.

"This medication fills an unmet need in our drug list and will greatly benefit the program's participants, many of whom may have gone without this needed medication," Dr Barton said.

Low-income Kentuckians can access the free prescription drugs through the following procedure:

- To learn whether they qualify, patients must first telephone the statewide toll-free Physicians Care hotline (1.800.633.8100) weekdays between the hours of 8 AM and 4:30 PM.
- To qualify, a patient must have a currently valid Kentucky Physicians Care eligibility form. The form documents that the individual has been appropriately screened as eligible, is without health insurance and is ineligible for such government

FRAUD AND ABUSE AUDITS UNDERWAY

Many physicians around the state are receiving letters from Kentucky's Medicare carrier, Administar, informing physicians they will be coming to audit certain charts. This is part of a nationwide effort initiated by the federal government to audit physician billings. According to the Director of HCFA's Program Integrity Group, the primary reason for the reviews is to come up with a statistically valid survey of physician documentation.

Of course, this does not mean this information will not be turned over to federal or state agencies for further action nor does it preclude their looking for other information. Physicians should review their office policies and procedures regarding documentation, as well as all facets of their practices.

In the past, the government has issued "Special Fraud Alerts," which gave notice to all medical providers, including physicians, of specific practices the government says might raise "red flags" as to whether the law has been violated.

SOME FRAUD ALERTS

- ☐ **Routine waivers of coinsurance and deductibles.** The government indicated that "when providers . . . forgive financial obligations for reasons other than genuine financial hardship of the particular patient, [the provider] may be unlawfully inducing that patient to purchase items or services from them . . ."
- ☐ **Hospital incentives to physicians.** The government indicated that inducements given to physicians by hospitals to ensure referrals may be suspect under the anti-kickback law. Suspect arrangements contained in the Special Fraud Alert include: free or significantly discounted office space or equipment; free or significantly discounted billing services; income guarantees; low-interest loans; and, inappropriately low-cost physician coverage in hospital group insurance plans.
- ☐ **Prescription drug marketing practices.** The government said it was concerned about drug companies conducting marketing activities that go beyond "traditional advertising and educational contacts." An example that may raise "red flags" is when a drug company offers a physician frequent flier miles each time a physician completes a drug company's questionnaire regarding one of its products.
- ☐ **Arrangements regarding the provision of clinical laboratory services that may violate the anti-kickback law.** The first such arrangement dealt with phlebotomy services being performed in physicians' offices by laboratories that are unrelated to traditional laboratory functions. Another type of arrangement concerned "free goods" offered by laboratories to physician offices such as the free pickup and disposal of biohazardous waste products that are unrelated to the laboratory's collection of specimens.

entitlement programs as Medicare and Medicaid.
- Physicians who participate in the Kentucky Physicians Care Program prescribe for qualified patients any of the participating products from the 5 companies.
- The eligible patient takes the prescription to a participating pharmacy and presents identification including a currently valid Kentucky Physicians Care eligibility form.
- The participating pharmacy fills the prescription with the participating companies' products and submits an order for eligibility verification and product replenishment.
- The participating pharmaceutical company will ship product replacement to the participating pharmacy.

"Parke-Davis and Pfizer, Inc's participation will further expand the 'safety net' of indigent care provided through this successful public-private partnership. They're providing a much-needed medication," Dr Barton added.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

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Robert S Mesirow DO — AN
106 Buena Vista Dr, Ashland 41101
1991, Chicago Col of Osteopathy

Carroll

Herodotos Ellinas MD — IM
1002 Hickory Switch Rd, LaGrange 40031
1992, U of Chicago

Clark

Rebecca O Bartee DO — S
205 Floyd Clay Dr, Winchester 40391
1997, Kirksville Col, Missouri

Fayette

Thomas D Armsey Jr MD — FP
300 Delaney Woods, Nicholasville 40356-8730
1992, Wright State U
Alan C Beckman MD — R
2673 Fireside Cir, Lexington 40513
1988, U of California, Irvine
Barry L Burchett MD — EM
854 McMeekin Pl, Lexington 40502
1976, U of Kentucky
Donald R Douglas MD — AN
280 Pasadena Dr, Lexington 40503
1986, U of Kentucky
Michael J Drass MD — AN
3028 Blenheim Way, Lexington 40503
1992, Penn State
Phoebe D Fisher MD — AN
317 S Mill St, Lexington 40508
1992, U of Pennsylvania
Mark L Gross MD — OPH
3509 Mellinocket Ct, Lexington 40503
1993, U of Kentucky
Henry A Harlamert MD — PTH
3912 Peppertree Dr, Lexington 40513-1331
1991, U of Cincinnati
Firdaus Hashim MD — AN
3900 Crosby Dr Apt 1617, Lexington 40515-1864
1988, Kasturba, India
Michael L McKinney MD — IM
2205 Cascade Way, Lexington 40515-1263
1993, U of Kentucky
Frederick J Michel MD — FP
1221 S Broadway, Lexington 40504
1971, Penn State, Hershey
Mubashir A Qazi MD — IM
333 Waller Ave Ste 100, Lexington 40504
1985, Kyber, Pakistan
Cristin M Rolf MD — PTH
100 Sower Blvd Ste 202, Frankfort 40601-8272
1991, Med Col of Ohio at Toledo
Harold H Rutledge MD — FP
3503 Arden Pl, Lexington 40517
1983, U of Kentucky
Tammy S Sanders MD — OTO
1740 Chandler Ln, Lexington 40504-2390
1992, U of Mississippi
Mark D Scott MD — FP
Kentucky Clinic 0284, Lexington 40536-0284
1989, Southern Illinois U
Stephen Jay Troum MD — ORS
1725 Harrodsburg Rd, Lexington 40504-3601
1991, Bowman Gray of Wake Forest
Alexander E Tzouanakis MD — PUD
166 Pasadena Dr, Lexington 40503-2907
1988, U of Texas, Galveston
Kryder E Van Buskirk III MD — P
4068 Peppertree Dr, Lexington 40513
1992, Med Col of Va
Veronica A Vasicek MD — ORS
1381 Copper Run Blvd, Lexington 40514-2219
1990, Quillen-Dishner, Tennessee
Greg R Wheeler MD — NS
101 Clubhouse Dr, Nicholasville 40356
1990, Wright State U

Graves

Majid Torabi MD — OTO
1547 Waverly Dr, Mayfield 42066-3725
1981, Faculty of Med of Isfahan, Iran

Harlan

Jameel A Butt MD — S
37 Ball Park Rd, Harlan 40831-1701
1971, U of Sind, Pakistan

Jefferson

John M Conner MD — ORS
1941 Deerwood Ave, Louisville 40205-1203
1992, U of Kentucky
Stuart H Hagan MD — EM
6309 Rockingham Ct, Prospect 40059-9341
1992, U of Louisville
Michael J Kelley MD — IM
1710 Cedar Point Rd, La Grange 40031-9766
1993, U of Louisville
Linda Korfhage MD — PTH

6302 Regal Rd, Louisville 40222
1984, U of Louisville

Therese-Anne LeVan MD — PS
3200 Todds Rd Apt 306, Lexington 40509-9494
1989, Rush, Illinois

Henry A Luban MD — IM
2222 Valley Vista Dr, Louisville 40205
1982, U of Vermont

Shannon M McAllister MD — IM
120 Fairmeade Rd, Louisville 40207-3905
1993, U of Louisville

Kenton

James Marcum MD — C
215 Thomas More Pkwy Ste A, Crestview Hills 41017-3493
1991, U of Texas, San Antonio

Knox

Forrest R Carter MD — OBG
HC 89 Box 254, Barbourville 40906
1973, U of Arizona

Logan

Kevin H Rigtrup MD — IM
128 Woodhurst Ln, Russellville 42276
1994, Vanderbilt

Michael P Stevens MD — AN
250 Lindsay Ln, Russellville 42276-9621
1991, U of Oregon

Laurel

Patrice Beliveau MD — ORS
1406 W 5th Street, London 40744
1989, U of Montreal

Marion

Daniel V Hunt MD — ORS
330 Loretto Rd, Ste 400, Lebanon 40033
1990, U of Alberta, Canada

James V Tobin MD — OBG
315 W High St, Lebanon 40033
1975, U of Louisville

Perry

Yu Cho Shih MD — S
401 Annice Way, Hazard 41701
1993, State U of New York, Buffalo

Warren

Sarah A Mayfield MD — IM
1300 Andrea St Ste 206, Bowling Green 42104
1993, U of Louisville

IN-TRAINING

Fayette

Ronald Forrest Koury DO — EM
Jackson Maddux MD — PMR
Andrea Leigh Skaggs MD — FP

Jefferson

Maria T Darrell MD — P
Brian John Williams MD — D
Christopher D Wohltmann MD — S

DEATHS

Ernest Mustgrave, MD
Paintsville
1922-1998

Ernest Mustgrave, MD, a general practitioner, died February 14, 1998. Dr Mustgrave was a 1954 graduate of the University of Puerto Rico School of Medicine and an active member of KMA.

Glenn Bryant, MD
Louisville
1914-1998

Glenn Bryant, MD, a retired OB/GYN, died February 26, 1998. A 1938 graduate of the University of Louisville School of Medicine, Dr Bryant was a life member of KMA.

A. Samuel Warren, III, MD
Lexington
1913-1998

A. Samuel Warren, III, MD, a retired internist, died March 10, 1998. Dr Warren graduated from Vanderbilt University School of Medicine in 1940 and was a life member of KMA.

Joseph Cona, MD
Louisville
1912-1998

Joseph Cona, MD, a retired general practitioner, died March 14, 1998. A 1936 graduate of the University of Louisville School of Medicine, Dr Cona was a life member of KMA.

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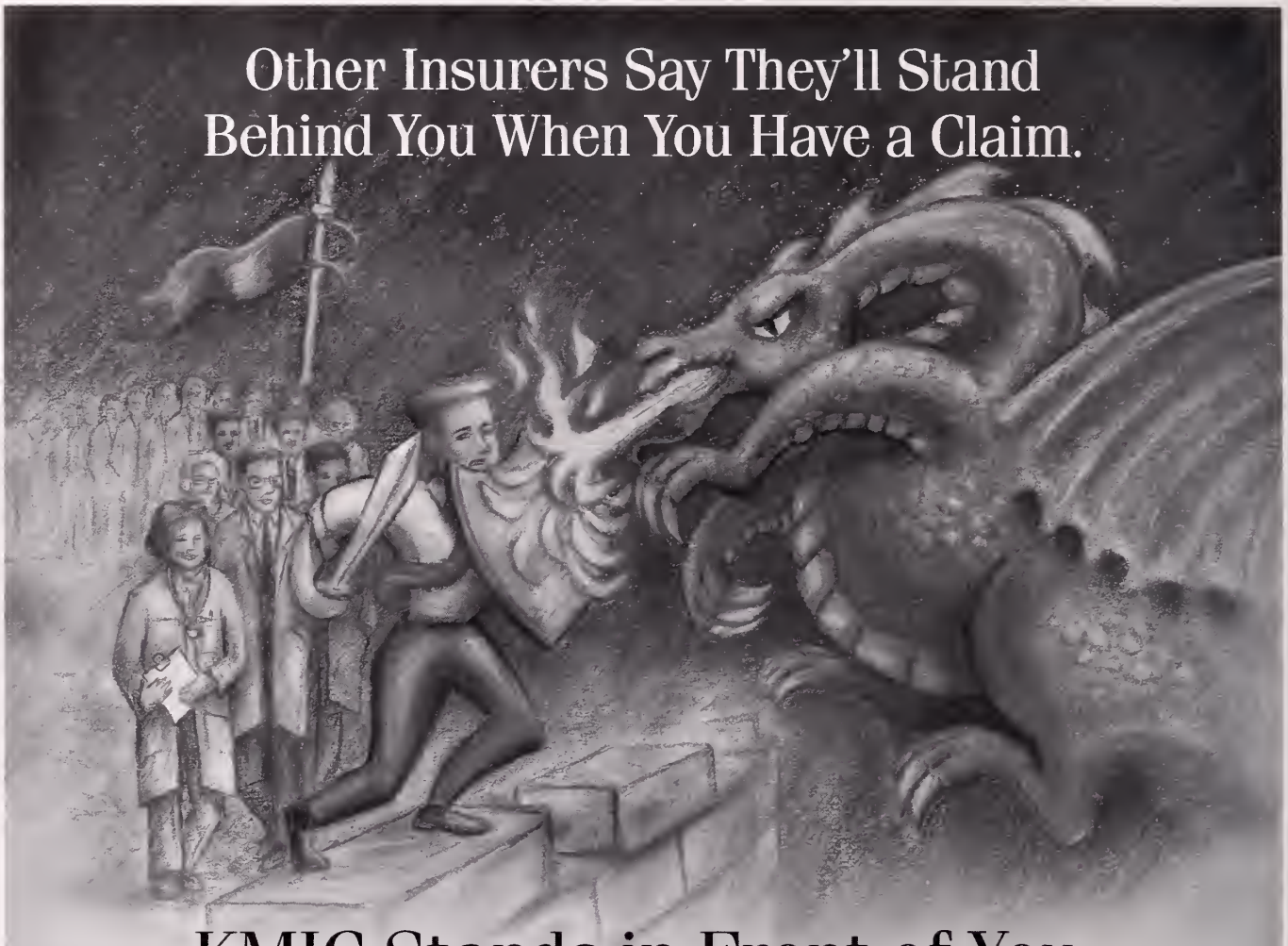
THE LATERAL CHEST RADIOGRAPH IN THE DETECTION OF PERICARDIAL EFFUSION: A REEVALUATION

JUNE 1998
VOLUME 94 NUMBER 6

Other Insurers Say They'll Stand Behind You When You Have a Claim.



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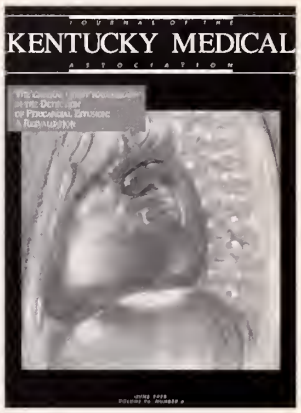

COVER:
The purpose of the study beginning on page 218 was to evaluate the usefulness of 10 previously published plain film signs for diagnosing pericardial effusion and to determine whether the posteroanterior (PA) or lateral chest radiograph was the better view for detecting pericardial effusion.

Artwork by Lee Wade of Eminence, KY.

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Louisville 40205-3338
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6206 Glen Hill Rd
Louisville 40222
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Cynthiana 41031-0730
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20 Medical Village Dr #308
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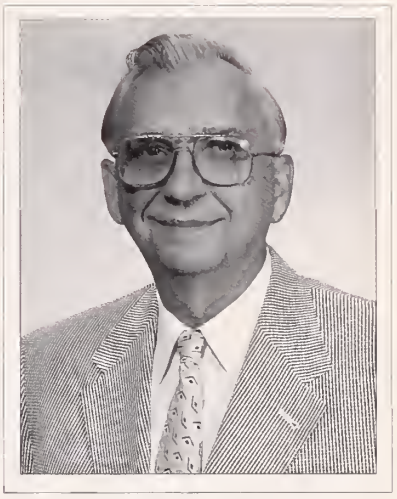
What Has Organized Medicine Done for Us Lately?



C. Kenneth Peters, MD

Since I have been involved in medicine, I have always been impressed with the work done by the national, state, and local medical associations on behalf of physicians. My experience in working with these organizations makes it puzzling to hear some of my colleagues say things like, "Why should I join? What has organized medicine done for me lately?" The Kentucky General Assembly just completed its work and I can tell you that without the hard work of organized medicine, physicians would have to deal with some very onerous burdens. But I will leave it to others to tell you about the triumphs we had in the legislature. I want to tell you another story about what organized medicine has done for physicians lately.

Many of my colleagues have expressed concern about the content of the new E & M documentation guidelines issued last year. The American Medical Association recently held a meeting in which physicians were given the opportunity to comment on the new guidelines and discuss them with representatives from the federal government. Before I get into what happened at that meeting, let me give you a brief history of how the guidelines were developed.

In 1992, the federal government hired Harvard University to develop a resource-based relative value scale (RBRVS) for Medicare payments. Two approaches to developing this system were discussed. The first approach, which was favored by the Harvard researchers, involved a time-based set of codes in which physicians would report the amount of time spent with the patient and payment would be generated based on that time. The second approach, which was favored by organized medicine, involved a richer set of codes that reflected the clinical content of the service, as well as the site of the service and general nature of the physician/patient relationship.

Content-based codes were accepted. However, the federal government insisted that if there were going to be content-based codes, there must be a means of documenting services to determine whether the services being reported were actually being provided. The government, without physician input, developed a set of documentation requirements for implementation in 1993. Upon review of those requirements, however, organized medicine determined they were unacceptable and successfully argued for their withdrawal. Part of the agreement to settle the issue included a promise from medicine to participate in a process to develop appropriate documentation guidelines.

In 1994, the National Medical Specialty Societies, coordinating through the CPT Editorial Panel, developed an initial set of documentation guidelines. Based on numerous requests, the guidelines were expanded by the development of "single system examinations" to insure that specialists and primary care physicians alike could clearly report level 4 and 5 services. The original 1994 guidelines, plus the single system and general multi-system examination definitions, basically constituted the 1997 E & M guidelines required by the federal government. When these new codes were released, many physicians expressed concern over their content, which led to the recent meeting coordinated by the AMA.

There are a few physicians who believe organized medicine should not work with the government and oppose the coding system. I disagree. The government has said it will institute a coding and documentation system with or without the input of physicians. 3M has developed such a coding system that could be used by the government and would have no input from physicians. The best way we as physicians can ensure that a proper system of coding and documentation is created is to have organized medicine involved in the process.

Physicians provided many constructive comments regarding the proposed documentation guidelines.

These comments said the proposed guidelines were overly complex; impractical for daily application; untested; cause patient care to suffer; and, force needless care. Based on these comments, the guidelines will be changed. A summary of some of these changes are outlined below.

So, what has organized medicine done for us lately? It has prevented the government from imposing an unworkable system of coding and documentation. It has ensured that physicians have input into the design and implementation of the system. And, it has worked quickly to ensure changes were made when physicians found the documentation guidelines too burdensome. Whatever one might think of the final product, I would rather see physicians involved in the process rather than do nothing and allow the process to take place without our input. For such input, we must have the involvement of organized medicine.

C. Kenneth Peters, MD
KMA President

Summary of Proposed "New Framework" for Evaluation and Management (E&M) Documentation Guidelines

These proposed changes to the 1994 and 1997 Evaluation and Management (E&M) documentation guidelines respond directly to the many specific comments received by the AMA from components or organized medicine and others. They reflect a new framework for documentation guidelines developed by a work group of the CPT Editorial Panel supported by AMA and HCFA staff. They are a work in progress and subject to change.

Summary of Changes

- *Shorten* the document substantially.
- Emphasize that a code may be selected and documented based on *counseling/coordination of care time alone*, without reference needed to any other dimensions of code selection (ie, history, examination, complexity of medical decision making).
- Emphasize that, for *established patients*, only two of the three key components need be performed (ie, history, examination, complexity of medical decision making).
- Simplify *history* selection by allowing documentation of two of the three history areas (HPI, ROS, and PFSH) instead of requiring all three to be documented.
- Add a clear note that, when a *history* can not be obtained due to specific patient conditions (eg, inability to communicate urgent, emergent situation, etc), the history is deemed "comprehensive" for coding and documentation purposes.
- Simplify *examination* criteria and enhance their clinical flexibility by eliminating forced and artificial distinctions between general multi-system exams and single system exams and eliminating confusing shaded and un-shaded boxes.
- Eliminate confusing *examination* instructions that take the form of "perform all elements and document 2 elements."
- Simplify the *medical decision* making section by eliminating one level (low complexity) — the proposed levels are straightforward, moderate, and high complexity.
- Further simplify the *medical decision* making section by allowing the highest complexity element, (ie, the number of diagnoses/risk of complications, diagnostic procedures/tests and or data to be reviewed, or management options) to drive selection of the level of decision making. This change eliminates the need to make a separate selection from the table of risk and then entering that decision into another matrix.

NEWS FOR KENTUCKY PHYSICIANS

HB 315 HIGH RISK DIAGNOSTIC CODES BEING IMPLEMENTED

The Guaranteed Acceptance Program (GAP) is an integral part of HB 315, the Health Insurance Reform legislation adopted by the 1998 Kentucky General Assembly. The GAP will include 28 high risk conditions at the outset. KMA has been meeting with the Commissioner of Insurance (COI) and other groups to establish levels of risk or severity of condition under the various designated high risks. In the future, the Commissioner may designate additional diagnosis for the GAP if sufficient information is presented by providers, carriers, or others. The General Assembly allocated $15.8 million to fund GAP. At the outset two carriers, Blue Cross-Blue Shield and Humana, will insure high risk patients. Under HB 315, the COI, by regulation, will establish uniform underwriting standards and a score or rating above which a condition is considered to be high-cost by using:

(1) Codes in the most recent version of the "ICD" that correspond to the medical conditions in the below listed diagnoses and the costs for administering treatment for the conditions.
(2) The most recent version of the questionnaire incorporated in a national underwriting guide generally accepted in the insurance industry as designated by the COI, the scoring scale for which shall be established by the COI.

The high risk medical conditions are:
AIDS, angina pectoris, ascites, chemical dependency, cirrhosis of the liver, coronary insufficiency, coronary occlusion, cystic fibrosis, Friedreich's ataxia, hemophilia, Hodgkin's disease, Huntington chorea, juvenile diabetes, leukemia, metastic cancer, motor or sensory aphasia, multiple sclerosis, muscular dystrophy, myasthenia gravis, myotonia, open heart surgery, Parkinson's disease, polycystic kidney, psychotic disorders, quadriplegia, stroke, syringomyelia, and Wilson's disease.

The COI is interested in comments on:

- The level of severity of the specified diagnosis that should be considered high cost and the corresponding ICD-9 Code.
- Whether additional diagnoses should be added to the list of high cost conditions, and if so, the additional diagnoses and severity levels that should be added and reasons for the additions. The COI has indicated that he does not intend to add to the diagnosis list unless a compelling interest to do so is presented.

The KMA is working with specialists and subspecialists, both in private practice and medical schools, to establish proper assignment of codes. Despite out-of-state insurance companies lobbying, under the guise of "promoting competition," the 1998 General Assembly refused to adopt amendments that would have permitted insurers to determine "high risk" or grant "carte blanche" in designating risk, rates, severity codes, and determining whether to insure an applicant.

The General Assembly also adopted a KMA amendment prohibiting discriminatory payments to providers treating patients insured by GAP. Providers under the GAP will be reimbursed at rates that are no less favorable than the rates paid to the comparable providers for services delivered to enrollees who do not have a high cost condition.

The KMA is unsure as to the exact process of implementing the regulations for GAP, although July 1, 1998, is the target date. Commissioner George Nichols is involving all parties in implementing the GAP.

KMA

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The Lateral Chest Radiograph in the Detection of Pericardial Effusion: A Reevaluation

John H. Woodring, MD

The purpose of this study was to evaluate the usefulness of 10 previously published plain film signs for diagnosing pericardial effusion and to determine whether the posteroanterior (PA) or lateral chest radiograph was the better view for detecting pericardial effusion. A retrospective study of 100 consecutive adult patients with pericardial effusions confirmed by echocardiography and/or computed tomography was undertaken. Five signs were found to be useful in detecting pericardial effusion on plain films, and the lateral chest radiograph was found to be better than the PA view in detecting pericardial effusion. The water-bottle configuration, widening of the carinal angle, and the differential-density sign were helpful in diagnosing pericardial effusion on the PA view. However, these signs were only seen in moderate-to-large effusions. The displaced epicardial fat pad sign and the posteroinferior bulge sign on the lateral view improved the detection of moderate-to-large pericardial effusions, and were also present in many of the cases with small pericardial effusions. Recognition of specific signs of pericardial effusion on the lateral chest radiograph may significantly improve the plain film detection of pericardial effusion.

Little has been written about the plain film diagnosis of pericardial effusion since the classic articles on the displaced epicardial fat pad sign by Lane and Carsky[1] and Carsky et al.[2,3] Lane and Carsky in 1968 reported that a displaced epicardial fat pad sign was present on the lateral chest radiograph of 65% of patients with large pericardial effusions.[1] Later, in a follow-up study in which small pericardial effusions were included, Carsky et al found a displaced epicardial fat pad sign in 52% of cases.[2,3] They considered the displaced epicardial fat pad sign to be the best plain film sign of pericardial effusion and the lateral radiograph to be the best view for detecting pericardial effusion.

However, others have not found the chest radiograph to be a useful tool in the diagnosis of pericardial effusion. Manyari et al,[4] using an enlarged cardiac silhouette, straightening of the left heart border, hyperacute right cardiophrenic angle, and a displaced epicardial fat pad as signs of pericardial effusion, performed a study comparing posteroanterior (PA) and lateral chest radiographs to echocardiography in detecting pericardial effusion. They found that only 20% of cases of pericardial effusion were detected on chest radiographs and they concluded that chest radiographs were unsatisfactory for detecting pericardial effusion. As a result, chest radiography is currently considered to be a poor detector of pericardial effusion, and little emphasis is placed upon the recognition of plain film signs of pericardial effusion. It is doubtful that even 20% of cases of pericardial effusion are detected on chest radiographs today.

In 1920, Holmes[5] reported that one of the best fluoroscopic signs of pericardial effusion was a characteristic alteration of the posteroinferior aspect of the cardiac silhouette in the lateral view in which the posteroinferior margin of the cardiac silhouette bulged posteriorly and inferiorly toward the spine forming an obtuse angle with the left hemidiaphragm. Shanks and Kerley,[6] in 1962, referred to this sign as the posteroinferior bulge sign and indicated that it was the earliest radiographic sign of pericardial effusion. After three thorough searches of the literature pertaining to pericardial effusion, I have been unable to find any subsequent mention of this sign of pericardial effusion in the literature.

Over the last few years, I have noticed that the posteroinferior bulge sign is present in many cases of pericardial effusion and is occasionally the only plain film abnormality in cases of small pericardial effusion. This has led me to perform a retrospective study of the plain film signs of pericardial effusion to determine whether or not the PA or lateral chest radiograph was the better view for detecting pericardial effusion, and to see which plain film signs were best for diagnosing pericardial effusion.

Subjects and Methods

The study group consists of 100 consecutive adult patients who had proven pericardial effusion and both PA and lateral chest radiographs. Adult patients who had only portable supine anteroposterior chest radiographs, and pediatric cases were not included in the study.

There were 53 women and 47 men ranging in age from 19 to 85 years. The cause of pericardial effusion in these 100 cases was as follows: end-stage renal disease with uremic pericarditis in 27; metastatic carcinoma in 17; postpericardiotomy syndrome in 13; congestive heart failure in 10; non-Hodgkin's lymphoma in 7; viral pericarditis in 7; bacterial pericarditis in 3; postmyocardial infarction syndrome in 3; tuberculous pericarditis, scleroderma, cardiac transplant rejection, and postoperative intrapericardial hemorrhage in 2 cases each; and invasive aspergillosis, blunt chest trauma, dis-

From the Department of Diagnostic Radiology, University of Kentucky Medical Center. Reprint requests to: John H. Woodring, MD, Department of Diagnostic Radiology, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0084.

secting aortic aneurysm, superior vena caval obstruction, and postoperative biliary fistula in one case each.

The diagnosis of pericardial effusion was confirmed by echocardiography (ECHO) in 73 of the 100 cases, by computed tomography (CT) of the thorax in 22, and by both CT and ECHO in 5. The size of the pericardial effusion was subjectively quantitated as small in 37 and moderate-to-large in 63.

The PA and lateral chest radiographs of all 100 patients were evaluated for the following 10 signs of pericardial effusion: enlarged cardiac silhouette,[7] water-bottle configuration of the cardiac silhouette on the PA view,[7] hyperacute right cardiophrenic angle,[5,7] loss of the retrosternal clear space,[7] widened carinal angle in the absence of signs of left atrial enlargement,[8] straight left heart border,[7] differential-density sign,[9,10] displaced epicardial fat pad sign,[1-3,7,11-14] posteroinferior bulge sign,[5,6] and decreased pulmonary vascularity.[7]

Enlargement of the cardiac silhouette, hyperacute right cardiophrenic angle, loss of retrosternal clear space, straight left heart border, and decreased pulmonary vascularity were considered to be nonspecific signs of pericardial effusion. Five signs, including the posteroinferior bulge sign, displaced epicardial fat pad sign, water-bottle configuration, widened carinal angle, and the differential-density sign, were considered to be relatively specific for pericardial effusion. The analysis of data concerned primarily the 5 specific signs of pericardial effusion.

The presence or absence of signs of pericardial effusion was recorded in each case. The cases were then divided into 2 groups based upon the size of the pericardial effusion. In both the 63 cases with moderate-to-large pericardial effusions, and the 37 with small effusions, the number of cases demonstrating the displaced epicardial fat pad sign, water-bottle configuration, widened carinal angle, or differential-density sign was recorded. Following this, the posteroinferior bulge sign was added as a sign of pericardial effusion and the number of cases demonstrating one or more of these 5 signs was recorded.

Results

The chest radiograph was abnormal in all 100 cases. The cardiac silhouette was enlarged in 89%, the posteroinferior bulge sign was present in 87%, there was loss of the retrosternal clear space in 53%, the displaced epicardial fat pad sign was present in 50%, the water-bottle configuration was seen in 40%, a hyperacute right cardiophrenic angle was present in 28%, the carinal angle was widened in 18%, the left heart border was straight in 18%, the differential-density sign was present in 13%, and diminished pulmonary vascularity was seen in 4% of the cases.

In the 63 cases of moderate-to-large pericardial effusions, all 5 specific signs of pericardial effusion were encountered. The water-bottle configuration was present in 40 (63%), the displaced epicardial fat pad sign was present in 36 (57%), a widened carinal angle was present in 18 (29%), the differential-density sign was present in 13 (21%), and the posteroinferior bulge sign was present in 59 (94%) of the 63 cases. When the water-bottle configuration, displaced epicardial fat pad sign, widened carinal angle, and differential-density sign were used as signs of pericardial effusion, specific signs of pericardial effusion were present in 56 (89%) of the 63 cases. When the posteroinferior bulge sign was added, specific signs of pericardial effusion were present in 63 (100%) of the 63 cases.

In the 37 cases with small pericardial effusions, only 2 specific signs of pericardial effusion were encountered. The displaced epicardial fat pad sign was present in 14 (38%), and the posteroinferior bulge sign was present in 28 (76%) of the 37 cases (Figures 1-4). When only the displaced epicardial fat pad sign was used as a sign of pericardial effusion, the diagnosis was apparent on the plain films in 14 (38%) of the 37 cases; however, when the posteroinferior bulge sign was added, specific signs of pericardial effusion were present in 31 (84%) of the 37 cases.

The lateral chest radiograph was better than the PA chest radiograph in detecting pericardial effusion. Of the specific signs of pericardial effusion, the displaced epicardial fat pad sign and posteroinferior bulge sign were only seen or were best seen on the lateral view. These signs were present in 50% and 87% of the cases, respectively, and were often present in cases of small pericardial effusion (Figures 1-4). The water-bottle configuration, widened carinal angle, and differential-density sign were only seen or were best seen on the PA view, and were present in 40%, 18%, and 13% of the cases, respectively. These signs were present only in moderate-to-large effusions.

Discussion

The results of this study indicate that PA and lateral chest radiographs are almost always abnormal in

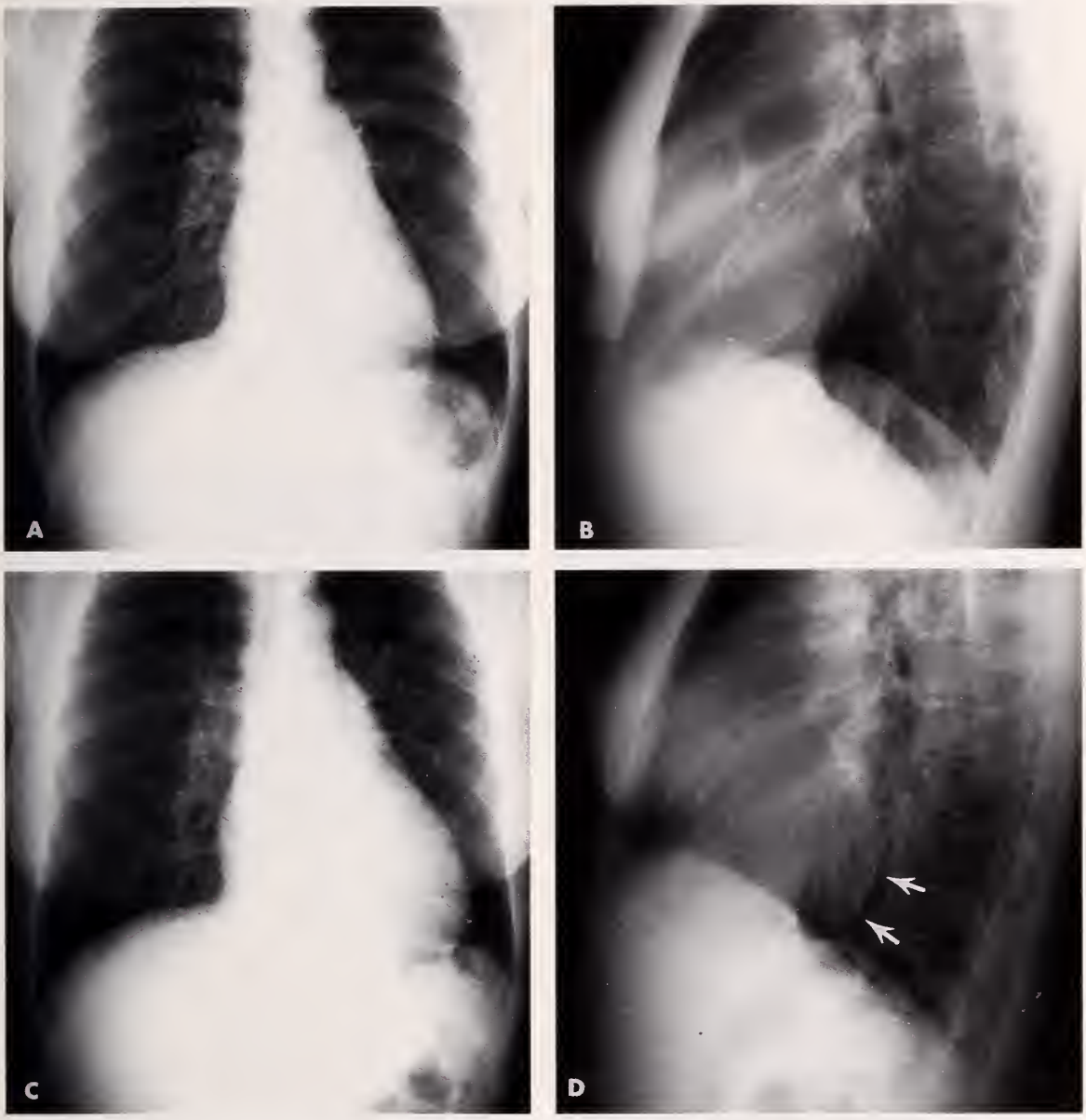

Figure 1 — Small pericardial effusion secondary to uremic pericarditis. Baseline PA (A) and lateral (B) chest radiographs of a 36-year-old woman with chronic renal failure show a cardiac silhouette of normal size and shape. After the development of uremic pericarditis, the PA chest radiograph (C) shows mild, nonspecific enlargement of the cardiac silhouette. The lateral view (D), however, shows a posteroinferior bulge sign. The posterior margin of the cardiac silhouette is more vertical in orientation, and the posteroinferior margin of the cardiac silhouette bulges downward toward the left hemidiaphragm and spine (arrows). ECHO confirmed small pericardial effusion.

cases of pericardial effusion. Unfortunately, many of the signs of pericardial effusion, including an enlarged cardiac silhouette, hyperacute right cardiophrenic angle, loss of retrosternal clear space, and straightening of the left heart border are nonspecific and are unlikely to evoke a prospective diagnosis of pericardial effusion. Furthermore, decreased pulmonary vascularity in pericardial effusion is very rare. The previously reported poor ability of plain films to detect pericardial effusion is likely due, at least in part, to heavy reliance on nonspecific or uncommon signs. However, Meszaros[7] suggests that any rapid enlargement in size of the cardiac silhouette should suggest the possibility of pericardial effusion.

Familiarity with specific signs of pericardial effusion might improve the plain film detection of pericardial effusion. Five signs are relatively specific for pericardial effusion, including the water-bottle configuration of the cardiac silhouette,[7]

widening of the carinal angle in the absence of signs of left atrial enlargement,[8] the differential-density sign,[9,10] a displaced epicardial fat pad,[1,3,7,11-14] and the posteroinferior bulge sign.[5,6] The water-bottle configuration, widened carinal angle, and differential-density sign are seen predominantly or only on the PA view, while the displaced epicardial fat pad sign and posteroinferior bulge sign are best seen or are only seen on the lateral view.

The classic water-bottle configuration of the cardiac silhouette on the PA view is relatively specific for pericardial effusion and is seen only rarely in other conditions such as Ebstein's anomaly or rheumatic tricuspid valve disease.[7] The water-bottle configuration was seen in 40% of the cases in this study. The sign was present in 63% of moderate-to-large pericardial effusions, but did not occur in any of the small pericardial effusions.

A widened carinal angle on the PA view may occur in pericardial effusion, left atrial enlargement, subcarinal lymphadenopathy, and bronchogenic cyst; however, when the cardiac silhouette is enlarged and the carinal angle is widened in the absence of signs of these other conditions, particularly those of left atrial enlargement, the diagnosis of pericardial effusion is relatively certain.[8] A widened carinal angle was present in 18% of the cases in this study. The sign was seen in 29% of the moderate-to-large pericardial effusions, but did not occur in any of the small pericardial effusions.

Spooner et al,[10] and Tehranzadeh and Kelley,[9] described cases of pericardial effusion in which the heart was surrounded by less dense fluid within the pericardial sac. This sign, which is known as the differential-density sign, is also relatively specific for pericardial effusion. It may be seen on either the PA or lateral view, but is usually best seen on the PA view.[9,10] The differential density sign was found in 13% of the cases in this study. Again, the sign occurred in 21% of the moderate-to-large pericardial effusions, but did not occur in any of the small pericardial effusions.

It is apparent that the PA view of the chest is unlikely to show specific signs of pericardial effusion unless the volume of pericardial effusion is sizeable. However, emphasis should be placed on the recognition of the water-bottle configuration of the cardiac silhouette as an aid to the diagnosis of moderate-to-large pericardial effusions. A widened carinal angle and the differential-density sign may occasionally be helpful.

Kremens[12] and Torrance,[11] in 1955 were the first to note that the normal subepicardial fat, or epicardial fat pad, often allowed the pericardial shadow, composed of the apposed layers of parietal and visceral pericardium, to be visibly separable from the heart on plain films. Kremens,[12] and later Jorgens et al,[13] Lane and Carsky,[1] and Carsky et al[2,3] found that the normal thickness of the pericardial shadow was 1-2 mm, and that pericardial effusion was likely if the thickness of the pericardial shadow exceeded 2 mm.

The normal pericardial shadow may be visualized occasionally on PA radiographs, but is usually best seen in front of the heart on lateral

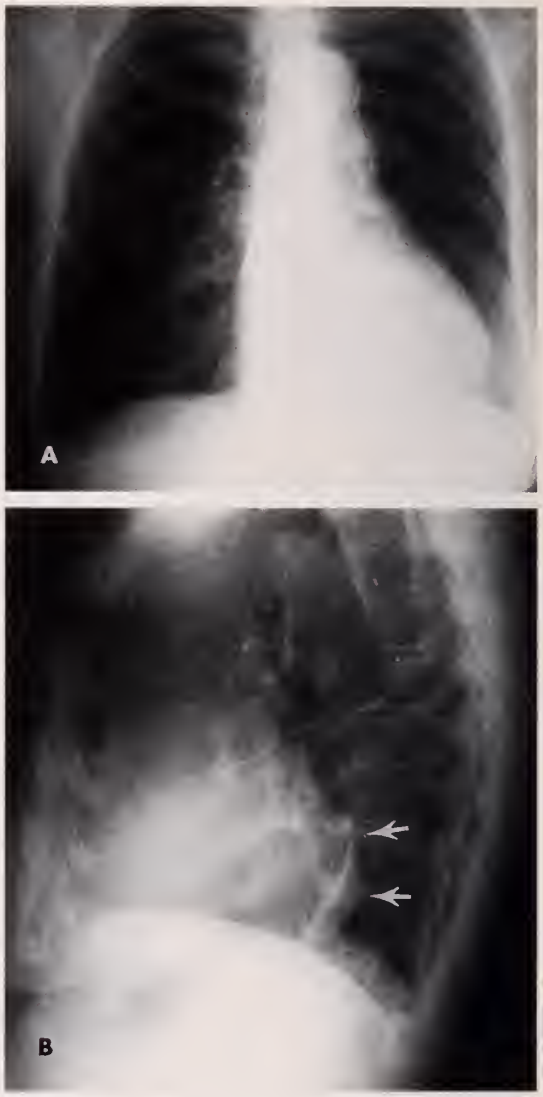

Figure 2 — Small pericardial effusion secondary to uremic pericarditis. In this 55-year-old woman with end-stage renal disease, the PA chest radiograph (A) shows mild, nonspecific enlargement of the cardiac silhouette. The lateral view (B) shows a prominent posteroinferior bulge sign in which the posteroinferior margin of the cardiac silhouette bulges downward and posteriorly (arrows) and overlaps the spine. ECHO confirmed small pericardial effusion.

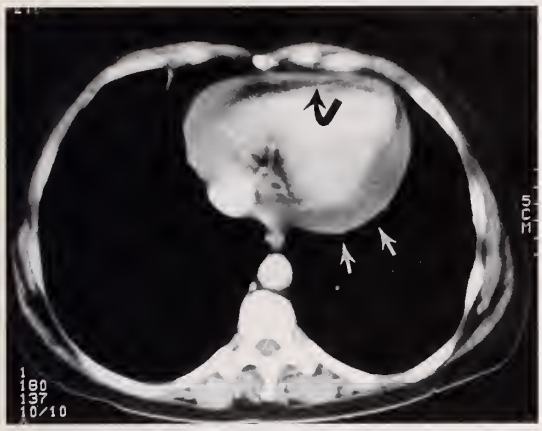

Figure 3 — CT of the thorax in a 48-year-old woman with metastatic carcinoma of unknown primary site shows a small pericardial effusion. Note predominant accumulation of fluid in the posteroinferior pericardial recess (white arrows), which explains the formation of the posteroinferior bulge sign. Pericardial effusion in the anterior portion of the pericardium is seen anterior to the epicardial fat pad (curved black arrow). The collection of fluid anterior to the epicardial fat pad causes the fat pad to appear inwardly displaced within the cardiac silhouette on the lateral chest radiograph.

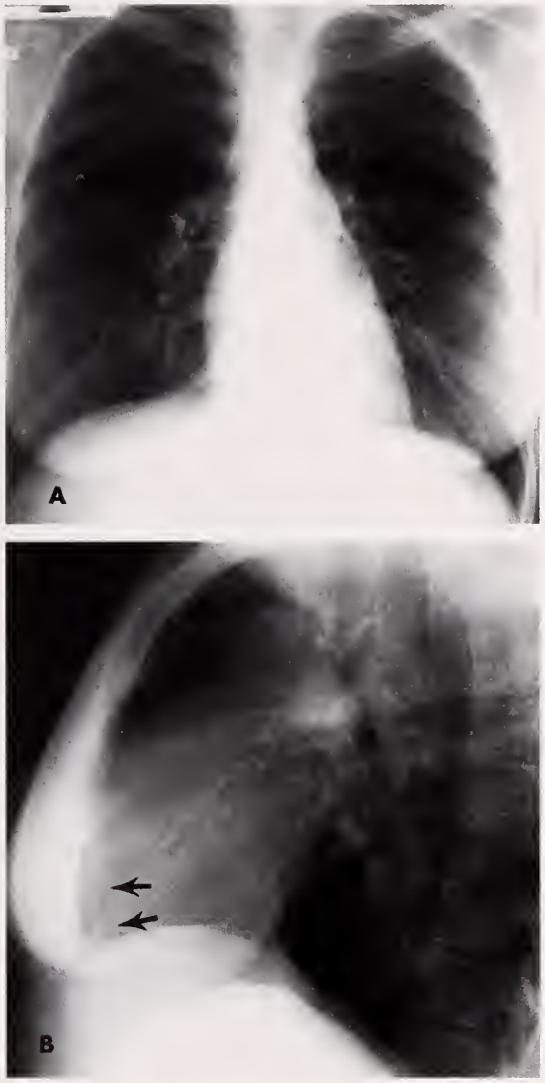

Figure 4 — Small pericardial effusion secondary to viral pericarditis. On the PA chest radiograph (A) the cardiac silhouette is of normal size and shape. On the lateral view (B) there is a displaced epicardial fat pad sign with thickening of the anterior pericardial shadow to 4 to 5 mm (arrows) anterior to the epicardial fat pad. ECHO confirmed small pericardial effusion.

chest radiographs.[1-3] The accumulation of fluid within the pericardial sac separates the visceral and parietal layers of the pericardium and produces visible widening of the pericardial shadow.[1-3,12-14] Although the epicardial fat pad remains in its normal location, the widening of the pericardial shadow causes the epicardial fat pad to appear inwardly displaced within the cardiac silhouette, and this sign is therefore referred to as the displaced epicardial fat pad sign.[1-3,12-14]

Lane and Carsky in 1968 reported that a displaced epicardial fat pad sign was present on the lateral chest radiograph of 65% of patients with large pericardial effusions.[1] Later, in a follow-up study in which small pericardial effusions were included, Carsky et al found a displaced epicardial fat pad sign in 52% of cases.[2,3] The sign was seen on the lateral chest radiograph in 41%, on the PA view in 23%, and on both views in 12% of cases.[2,3] They considered the displaced epicardial fat pad sign to be the best plain film sign of pericardial effusion and the lateral chest radiograph to be the best view for detecting pericardial effusion. False-positive diagnoses may occasionally occur from pericardial thickening without effusion,[15] anterior mediastinal masses,[16] and cardiac levorotation.[17]

In this study the displaced epicardial fat pad sign was seen almost exclusively on the lateral view, but was also seen on the PA view in a few cases. A displaced epicardial fat pad sign was present in 50% of the cases. The sign was noted in 57% of the moderate-to-large pericardial effusions, and was also seen in 38% of the small pericardial effusions (Figure 4).

The posteroinferior bulge sign, first described by Holmes[5] in 1920, appears to be the best sign of pericardial effusion. Studies of pericardial fluid distribution have shown that pericardial effusion usually accumulates predominantly along the diaphragmatic surface of the heart and in the posteroinferior pericardial recess[5,6,18] (Figure 3). In early pericardial effusion, the normal acute angle formed by the posteroinferior cardiac margin and the left hemidiaphragm is lost, and the posterior aspect of the cardiac silhouette assumes a vertical orientation[5,6] (Figure 1). As the effusion increases in size,

the posteroinferior margin of the cardiac silhouette bulges posteriorly and inferiorly toward the spine forming an obtuse angle with the left hemidiaphragm[5,6] (Figure 2). The sign is particularly useful in diagnosing pericardial effusion when comparison with prior chest radiographs shows that the posteroinferior bulge in the cardiac silhouette is an acute change (Figure 1). Left ventricular dilatation may alter the posterior contour of the cardiac silhouette; however, the left ventricle usually does not dilate acutely, and the angle formed by the dilated left ventricle and left hemidiaphragm usually remains acute.

In this study the posteroinferior bulge sign was present in 87% of the cases. It was seen in 94% of the moderate-to-large pericardial effusions, and was present in 76% of small pericardial effusions (Figures 1 and 2). The sign is not always present since pericardial effusion may occasionally accumulate anterior to the heart[19] or along the right heart border.[6,20] However, inclusion of the posteroinferior bulge sign as a criterion for the diagnosis of pericardial effusion could significantly increase the detection of pericardial effusion on plain films.

In summary, the plain film diagnosis of pericardial effusion can be improved by the recognition of 5 specific signs of pericardial effusion. On the PA view the best signs of pericardial effusion are the water-bottle configuration, widening of the carinal angle, and the differential-density sign. Unfortunately, these signs are only seen in moderate-to-large effusions. The lateral chest radiograph is the better view for detecting pericardial effusion. The displaced epicardial fat pad sign and the posteroinferior bulge sign significantly improve the detection of moderate-to-large pericardial effusions, and are present in many cases of small effusions as well.

References

1. Lane EJ Jr, Carsky EW. Epicardial fat: lateral plain film analysis in normals and in pericardial effusion. *Radiology.* 1968; 91:1-5.
2. Carsky EW, Mauceri RA, Azimi F. The epicardial fat pad sign: analysis of frontal and lateral chest radiographs in patients with pericardial effusion. *Radiology.* 1980;137:303-308.
3. Carsky EW, Azimi F, Mauceri R. Epicardial fat pad sign in the diagnosis of pericardial effusion. *JAMA.* 1980;244:2762-2764.
4. Manyari DE, Milliken JA, Colwell BT, Burggraf GW. Detection of pericardial effusion by chest roentgenography and electrocardiography versus echocardiography. *Can Med Assoc J.* 1978;119:445-450.
5. Holmes GW. The radiographic findings in pericarditis with effusion. *Am J Roentgenol.* 1920;7:7-15.
6. Shanks SC, Kerley P, eds. *A Text-book of the X-ray Diagnosis by British Authors in Four Volumes,* 3rd ed. Vol 2. Philadelphia, Pa: Saunders; 1962:231-236.
7. Meszaros WT. *Cardiac Roentgenology: Plain Films and Angiographic Findings.* Springfield: Charles C. Thomas; 1969: 213-232.
8. Chen JTT, Putman CE, Hedlund LW, Damash NS, Roberts L. Widening of the subcarinal angle by pericardial effusion. *AJR.* 1982;139:883-887.
9. Tehranzadeh J, Kelley MJ. The differential density sign of pericardial effusion. *Radiology.* 1979;133:23-30.
10. Spooner EW, Kuhns LR, Stern AM. Diagnosis of pericardial effusion in children: a new radiographic sign. *AJR.* 1977; 128:23-25.
11. Torrance DJ. Demonstration of subepicardial fat as an aid in the diagnosis of pericardial effusion or thickening. *Am J Roentgenol Rad Therapy Nuc Med.* 1955;74:850-855.
12. Kremens V. Demonstration of the pericardial shadow on the routine chest roentgenogram: a new roentgen finding — preliminary report. *Radiology.* 1955;64:72-80.
13. Jorgens J, Kundel R, Lieber A. The cinefluorographic approach to the diagnosis of pericardial effusion. *Am J Roentgenol Rad Therapy Nuc Med.* 1962;87:911-916.
14. Wang K, Hodges M. Detection of normal pericardium and of pericardial effusion in the lateral chest radiograph. *Circulation.* 1996;93:1254.
15. Engle RB, Upham AT. Positive epicardial fat pad sign without pericardial effusion. *JAMA.* 1982;247:1695.
16. Demos TC, Cardella RG, Moncada R, Reynes CJ, Love L, Churchill RJ. Epicardial fat sign due to extrapericardial disease. *AJR.* 1983;141:289-291.
17. Hirji MK, Johnson MA, Hennig RC. Cardiac levorotation: a cause of false-positive epicardial fat pad sign. *Radiology.* 1986;161:659-660.
18. Soulen RL, Lapayowker MS, Cortes FM. Distribution of pericardial fluid: dynamic and static influences. *Am J Roentgenol Rad Therapy Nuc Med.* 1968;103:583-588.
19. Gale ME, Kiwak MG, Gale DR. Pericardial fluid distribution: CT analysis. *Radiology.* 1987;162:171-174.
20. Green B, Zornoza J, Ricks JP. Eccentric pericardial effusion after radiation therapy of left breast cancer. *AJR.* 1977;128:27-30.

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Bronchial Foreign Bodies Simulating Endobronchial Malignancy

Kasem Charnvitayapong, MD; Daniel L. Miller, MD; William A. Hymes, MD; Eugene C. Fletcher, MD

From the Department of Medicine, Division of Respirotory, Environmental ond Criticol Core Medicine, ond Division of Cordiothorocic Surgery, Department of Surgery, Louisville Veterons Affoirs Medicol Center ond the University of Louisville School of Medicine, Louisville, KY 40292.

Reported are two cases of benign endobronchial lesions with granulomatous reactions that led to complete airway obstruction. Combined with a long history of cigarette smoking and the appearance of a hilar mass, these lesions appeared clinically to be bronchogenic carcinomas. Both cases went to thoracotomy, but in each case the requirement that malignant tissue be identified, allowed recognition of a foreign body in one case, and broncholith in the second, avoiding pneumonectomy in both cases.

Case 1

A 58-year-old African American male presented to the emergency room with a 12-hour history of increasing shortness of breath, left sided pleuritic chest pain, productive cough, subjective fever, and chills. He consumed 2 to 3 beers/day and had approximately a 50-pack year cigarette smoking history. The patient's temperature was 101.8°F. He was tachypnic, tachycardic, and hypertensive.

Physical examination was pertinent for decreased breath sounds over the left chest with bibasilar rales and egophony. White blood count was 23,100 with a left shift. Arterial blood gases on 2 L/min nasal cannula were pH 7.46, pCO_2 35.6, pO_2 62. Chest radiograph revealed calcified hilar and peribronchial lymph nodes, left lower lobe infiltrate/atelectasis, and left pleural effusion.

The day following admission, the leukocyte count decreased but the patient's oxygen requirement increased. In addition, there was worsening of the left lung infiltrate and collapse. Computerized tomography of chest showed right basilar, lingular and left upper lobe airspace disease representing atelectasis and/or pneumonia. There were calcified mediastinal and peribronchial nodes (Figure 1-A) and a small fluid collection in the lingula resembling an abscess. Fiberoptic bronchoscopy revealed a fungating mass completely occluding the lingular bronchus (Figure 1-B). Biopsy was performed. Also noted was marked compression of the left lower lobe bronchi.

Thoracentesis recovered bloody fluid which was an exudate. Gram stain showed gram positive diplococci but culture of the pleural fluid was negative. Sputum grew pneumococcus. The endobronchial biopsy showed extensive acute and chronic inflammation with squamous metaplasia, negative for malignancy.

Thoracotomy was recommended for possible malignancy. Prethoracotomy bronchoscopy revealed a small yellow tan calcified mass in the lingular bronchus which appeared to be calcified. The calcified mass was removed with forceps. Lingular segmentectomy was performed and frozen section failed to reveal malignancy. Pleural decortication was performed on the collapsed lower lobe. The postoperative course was uneventful and the patient was discharged to home. The post-operative chest roentgenogram showed blunting of left costophrenic angle but good expansion of left lung.

Case 2

A 69-year-old man with a 100 pack-year smoking history was referred to the pulmonary service for evaluation of an abnormal chest radiograph. He had a chronic cough productive of yellow sputum but denied hemoptysis, fever, chills or weight loss. Physical exam revealed rhonchi in the left upper lung field but was otherwise unremarkable. A complete blood count and blood chemistries were normal. Chest radiograph (Figure 2-A) revealed left hilar fullness with a left upper lobe perihilar infiltrate. Computerized tomography of the chest demonstrated a left hilar mass with a "postobstructive infiltrate." At fiberoptic bronchoscopy a fungating endobronchial mass was seen in the left upper lobe bronchus, with near total occlusion of the lumen. A moderate amount of purulent secretions emanated from the region. Bronchial brushing and

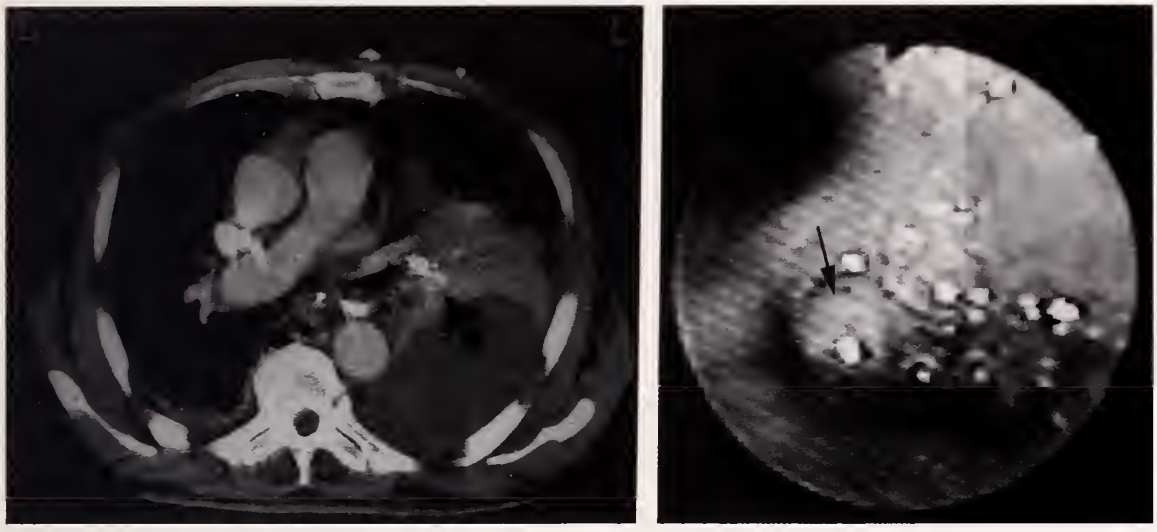

Figure 1 — A. Computerized tomography section through the proximal lingular airway. The airway is occluded by a lesion that appears to have a calcific mass in the center.
B. Photograph via fiberoptic bronchoscopy showing endobronchial mass (arrow) protruding from and obstructing the lingular orifice. Biopsy of this tissue was negative for malignancy (arrow).

washing revealed inflammatory changes but no malignant cells. Cultures of endobronchial secretions were negative.

The patient was taken to the operating room for left thoracotomy and lobectomy for presumed bronchogenic carcinoma. At thoracotomy, multiple bronchial and peribronchial biopsies failed to demonstrate a malignancy. A sterile fiberoptic bronchoscope was inserted through a bronchotomy into the left mainstem bronchus and in the midst of the previously observed fungating lesion. A yellowish foreign body was recovered by grasping it with the flexible biopsy forceps and removing the bronchoscope. The foreign body appeared to be a vertebral body with a dorsal spine (Figure 2-B), probably that of a fish. Stains of bronchial washings revealed gram positive branching hyphae reported as actinomycosis.

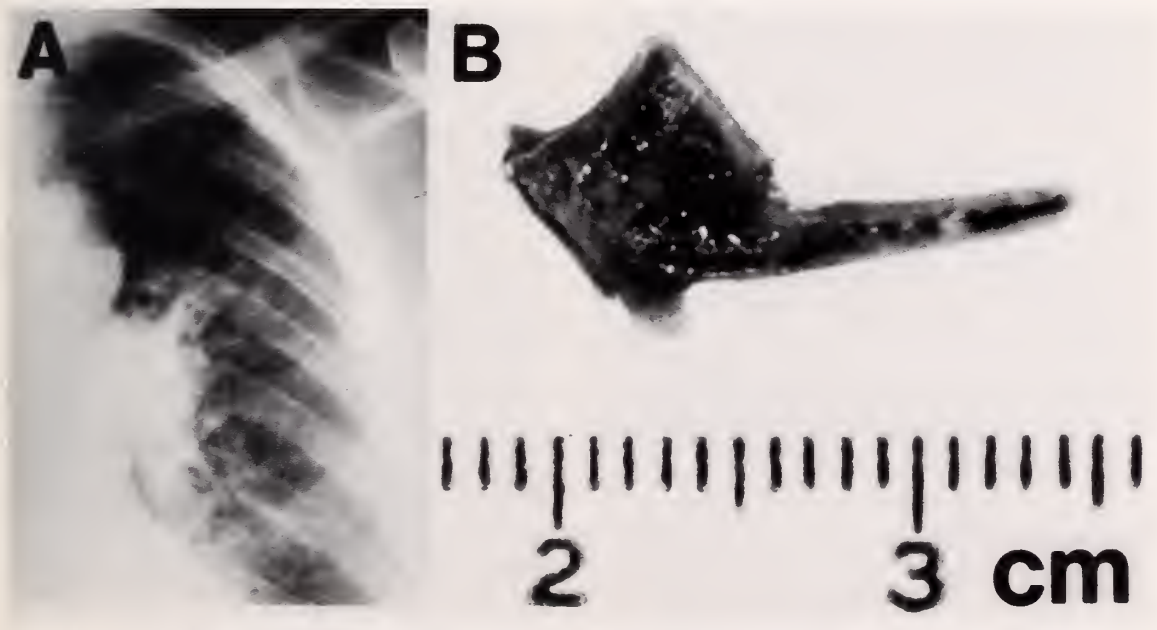

Figure 2 — A. Chest radiograph showing left hilar mass suspicious for malignancy.
B. Photograph of foreign body (fish spine) removed from bronchus intraoperatively using flexible forceps through a bronchoscope.

Postoperatively the patient recalled an episode of aspiration of a fish bone 16 years earlier. At that time a laryngoscopy and esophagoscopy failed to show a foreign body. Rigid bronchoscopy was not carried out at that time because of the patient's refusal.

Discussion

Atelectasis or infiltrate accompanied by the appearance of a hilar mass on chest roentgenogram, in a patient who has been a heavy smoker, is highly suggestive of a malignant endobronchial obstruction. When bronchoscopy confirms the presence of an endobronchial mass, the odds are overwhelming that bronchogenic carcinoma is the cause and that surgical removal of a part or all of the involved lung will be the most likely course of action leading to potential cure. Rarely, a benign process can simulate endobronchial malignancy. A persistent attitude, on the part of the treating physicians, requiring that tissue confirmation of malignancy be made prior to major surgical resection, may save the patient a more radical procedure such as pneumonectomy in the rare case where a benign lesion is the source of the obstruction. These two case reports illustrate unusual lesions which, up until the time of surgery, had every appearance of endobronchial malignancy.

Case one typifies broncholithiasis, a disorder characterized by bronchial inflammation or obstruction caused by a broncholith. A broncholith is a calcified lymph node or other calcified material within the bronchus. The definition has been expanded to include peribronchial calcified lymph nodes which distort the anatomy of the airway.[1] The important radiologic characteristic is calcification of an endobronchial or peribronchial lymph node. Plain chest radiograph, tomography, or computerized tomography can suggest a diagnosis of broncholithiasis.[2] Any disorder causing calcification of soft tissue or lymph node can lead to formation of a broncholith. Most frequently this occurs as a result of granulomatous infections such as tuberculosis or fungal disease. With obstruction of the bronchus, either by an endobronchial lesion or external bronchial compression, the resulted chronic inflammation may show cells with an atypical appearance. The patient in the present case had a fungating endobronchial lesion simulating bronchogenic carcinoma as a result of the chronic inflammatory reaction to a calcified lymph node which had eroded into the bronchus.

The majority of episodes of lung aspiration are symptomatic, although occasionally several years may lapse before the onset of symptoms.[3] Usually, delayed symptoms are from manifestation of airway obstruction: wheezing, atelectasis and infection. Radiographic signs include hyperinflation, atelectasis, infiltrate and in a minority of cases, visualization of a radiopaque foreign body.[2] There are case reports of bronchial foreign bodies simulating bronchogenic carcinoma, not infrequently detected at thoracotomy.[3] Cytologic samples in the second case suggested superimposed actinomycosis, although cultures failed to confirm this. Thoracic actinomycosis may occasionally simulate lung carcinoma and is sometimes diagnosed after lung resection. In addition, actinomycosis has been reported with a bronchial foreign body simulating an endobronchial malignancy.[4]

The foreign body in our patient remained in the bronchus for at least three years judging from previous chest roentgenograms. However, we cannot exclude its presence for 16 years dating to the episode of aspiration recalled by the patient.

The latency between the initial aspiration and the onset of symptoms as well as the infrequent radiologic identification of a radiopaque body make the diagnosis of foreign body aspiration difficult. A high index of suspicion was required in order to correctly diagnose foreign body granuloma endoscopically, thereby avoiding pneumonectomy. In the present case, absolutely no portion of the foreign body was identified during preoperative bronchoscopy. The dorsal spine of the vertebral body became visible at the center of the mass after manipulation and distortion of the lung at thoracotomy.

While such benign causes of endobronchial obstruction are relatively rare compared to the more ominous diagnosis of bronchogenic carcinoma, the recognition of the benign disease is extremely important to the occasional patient with this problem. If the lung distal to the obstruction is not grossly infected or destroyed, resection of the parenchyma can be avoided. In some cases, the endobronchial foreign body can be removed and the granulation tissue resected by rigid bronchoscopy or at thoracotomy by sleeve resection of the bronchus. Only a strong suspicion of foreign body granuloma, or the requirement that a malignant etiology of the lesion be identified prior to full lung resection, can expose these rare but significant cases of bronchial obstruction that might otherwise lead to unnecessary lung resection.

References

1. Arrigoni MG, Bernatz PE, Donoghue FE. Broncholithiasis. *J Thorac Cardiovasc Surg.* 1971;62:231-237.
2. Conces DJ, Tarver RD, Vix VA. Broncholithiasis: CT features in 15 patients. *Am J Radiology.* 1991;157:249-253.
3. Weiss E, Krusen FH. Foreign body in the lung for thirty-five years complicated by abscess and tumor formation. *JAMA.* 1922;78:506-507.
4. Weissberg D, Schwartz I. Foreign bodies in the tracheobronchial tree. *Chest.* 1987;91:730-733.
5. Nigam BK, Bronchial foreign body masquerading as a lung carcinoma. *Indian J Chest Dis Allied Sci.* 1990;32:43-47.
6. Umeki S, Nakajima M, Tsukiyama K, et al. Foreign body-induced bronchial actinomycosis with severe stenosis that must be distinguished from lung cancer. *Nippon Kyobu Shikkan Gakkai Zasshi.* 1990;28:481-486.

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Health Care for Kentucky's Uninsured Indigents: The Perspective of Providers in the Kentucky Physicians Care Program

Arch G. Mainous III, PhD; Charles H. Griffith III, MD, MSPH; L. Joyce McCown

The pressing issue of providing care for the uninsured indigent has been addressed in Kentucky by a unique private sector program that depends on physician donation of services. The Kentucky Physicians Care (KPC) program which provides health care to uninsured indigent patients in Kentucky was evaluated from the perspective of the participating physicians through in-depth interviews with 22 randomly selected physicians. The results of the interviews suggested that the KPC program is generally viewed by participating providers as a successful and personally rewarding enterprise. Suggestions for improving services included strategies to increase awareness of the program for both patients and providers. As state and federal policy continues to focus on the uninsured as a vulnerable population, integration of this private sector program into a partnership with the public sector may be a worthwhile strategy.

An estimated 40 million Americans have no health insurance.[1] Lack of health insurance has been shown to be related to a decreased likelihood of using ambulatory care,[2,3] obtaining preventive services,[4,5] and having a usual source of care.[6,7]

Individuals in Kentucky have attempted to address the problems of health care access for the uninsured with a relatively unique program coordinated through a private foundation, Health Kentucky, Inc (formerly known as the Kentucky Health Care Access Foundation, Inc). The foundation administers a statewide voluntary safety net which includes the Kentucky Physicians Care (KPC), a program organized by the Kentucky Medical Association. The KPC program is a referral system whereby indigent patients, below 100% of Federal Poverty income, who are ineligible for Medicaid or any other type of governmental medical program can be referred to participating Kentucky physicians. As of January 1995, more than 136,000 Kentuckians were certified eligible for the KPC program. The volunteer participating physicians are asked to see the patient at no charge for the first visit and to see them for needed subsequent visits based on the patient's ability to pay. The program strongly encourages continuity of care, but if the physician cannot provide ongoing free care to the patient the patient is referred back to the program for referral to another participating physician.

The purpose of this study was to evaluate the program from the perspective of the provider.

From the Departments of Family Practice (AGM, LJM) and Internal Medicine (CHG), University of Kentucky. Dr Mainous is now at the Department of Family Medicine, Medical University of South Caralina.

The study was funded in part by a grant from Health Kentucky, Inc and the Good Samaritan Foundation, Inc.

Methods

In-depth interviews with a sample of 22 randomly selected physicians in the KPC program were conducted. All interviews were conducted using a semi-structured interview schedule. The interviews were conducted by phone at the convenience of the physician and required less than 15 minutes to complete. In-depth interviews were conducted to clarify and expand on issues related to the provision of care in the KPC program. The in-depth interviews were content analyzed with the recording of major themes and context.[8]

Results

Perceptions of KPC Patients

The specialties of the participating physicians varied from general practice to areas of specialty. Ninety-five percent of KPC patients are seen primarily in the office setting. According to the informants, the majority of KPC patients are seen for acute illnesses and routine exams, while about a third are seen for illness of a more chronic nature. The informants believed that the KPC patients sought care when medical attention was truly needed. Unanimously, the informants found no problem with KPC patients showing for appoint-

ments. However, the screening procedure of the KPC candidates was questioned by some physicians (10%) who believed some persons utilizing the program were not qualified recipients.

Most of the interviewed physicians find the KPC patient to be similar in nature to the Medicaid patient. Although the overwhelming majority of the providers believed most KPC patients were grateful for the care received, two providers feel that the KPC patient is not appropriately grateful and tends to expect that the care as well as ancillary services will be free.

Perceptions of Administration of the Program

Most participating physicians reported having no problem with the administration process of the program. Approximately one-third (32%) could not comment on the administrative process because it is handled by their office staff. The remaining 8% said that the KPC patient's knowledge of the procedures of the program is so poor that it creates more work for their staff.

About a third (32%) of the primary care providers found it difficult to refer patients due to a shortage of specialists participating in the program. This feeling was particularly acute in more rural areas. It was suggested that the program could be enhanced by providing a list of participating specialists to the participating physicians.

Perceptions of Importance of the Program

The majority (64%) of participating physicians feel that this is a much needed program which enables them to give back to the community. Many expressed personal satisfaction in helping to provide such a service. Other physicians claimed no direct benefit, but felt that providing free care is part of their social obligation as a physician.

Preventive Services in the KPC Program

When asked how they handle preventive services, the informants were grouped nearly equally into three primary strategies. One group reported that they send KPC patients to the health department, local hospital, or that the service is provided by traveling medical facilities once a month for a nominal fee. Another group reported that all preventive services were handled in their office, and a third group of providers reported that they do not provide these services or chose not to comment due to the small percentage of KPC patients in their practice. A small percentage of providers send patients back through the program with recommendation for testing.

Utility of Telephone Triaging with the KPC Population

Telephone triaging was not perceived to be useful with KPC patients by a substantial proportion of providers because most patients either need to be seen or they do not have access to phones. An alternative theme was forwarded by a smaller group of physicians who felt that telephone triage was useful or could be useful with the KPC patient in terms of placement with the correct physician, although it was stated that office staff tend to be non-committal and usually suggest that patients be seen. Nearly a third of the informants would not comment on triaging because it is handled primarily by office staff.

Suggestions for the Program

When asked about alternative ways to provide care about a fourth of the interviewed physicians reported being pleased with the program and no alternatives came to mind. Among those that did offer suggestions a common theme was to increase continuity of care, perhaps by opening an afternoon clinic staffed by volunteer physicians. Other suggestions included: (1) Creation of a national health care plan; (2) Creation of a program similar to Medicaid; (3) Send uninsured indigents to the local Health Department; (4) Send uninsured indigents to the University of Kentucky or University of Louisville; and (5) Generate more tax dollars and use those funds to pay physicians to promote care for indigents.

Specific comments about improving the program included improving pharmacy services to KPC patients by increasing pharmacy and pharmaceutical company participation. Moreover, many patients do not have transportation and need to travel to other cities to locate participating pharmacies. It was also stated that there is a need for feedback from pharmacies regarding individuals who participate in the program.

Other comments included: (1) A need for more networking among participating physicians enabling them to know what medical areas need attention and if any physicians are overburdened with KPC patients; (2) A need for a quarterly letter sent out to physicians on the progress of the program; (3) A need for physicians and recipients to be better informed on the benefits and procedures of the KPC program since the program may actually be underutilized due to lack of knowledge; and (4) The patient participant screening process needs to be reviewed to ensure qualified patients.

Discussion

The Kentucky Physicians Care program represents a unique attempt to overcome the problem of access to medical care for the indigent and uninsured through the altruism and voluntary participation of providers. We attempted to evaluate the relative success of this program from the provider's point of view. From the provider's point of view the program appears to generally be a success. The patients seen are viewed as in need of medical attention, keep their appointments, and are appreciative of the care. Many of the patient problems (68%) are acute problems, with most care provided in the provider's office rather than in an emergency room (the only other outlet for many of these patients). Most KPC providers found the program personally fulfilling or a part of their social obligation as physicians.

The KPC program appears to be effective in overcoming the problem of access to care for the uninsured indigent, in a way that is fulfilling to providers. However, challenges for the program noted by the providers include the difficulty of identifying participating specialists and pharmacies for those patients identified as needing a referral or needing medications. Additional challenges for providers is furnishing preventive services for the uninsured, since there is often no outlet or funding source to pay for ancillary tests (ie, mammography, cholesterol screening, etc).

Phone triage is also a challenge for this population of patients who many times have no phone. The primary suggestions of the providers to improve the program involve better communication between and information about participating providers, specialists and pharmacies, as well as better communication of information for patients who may qualify but be unaware of the program.

There are several limitations to this study that should be noted. First, the generalizability of this information to other states and programs for the uninsured may be limited. However, this is a unique program that has been successful in Kentucky and may actually be valuable as a model for other states. Second, the data are based on the perspectives of community practitioners whose knowledge of the program may be limited. It was suggested by the informants that more education of the medical community about the program would be helpful. The perspective of practitioners actually providing care in a program based on physician donation of services would seem however to be invaluable data.

In summary, the KPC program is generally viewed by participating providers as a successful and personally rewarding enterprise. Creative solutions like the KPC program to pressing health care delivery issues such as access to care for the medically uninsured should be applauded. Further innovations and improvements to programs like this will help to provide a full range of health care to the medically uninsured.

References

1. Employee Benefit Research Institute Special Report SR-28, issue brief number 158, February 1995.
2. Stoddard JJ, St Peter RF, Newacheck PW. Health insurance status and ambulatory care for children. *N Engl J Med.* 1994;330:1421-1425.
3. Rowland D, Lyons B. Triple jeopardy: rural poor, and uninsured. *Health Services Res.* 1989;23:975-1004.
4. Bindman AB, Grumbach K, Osmond D, Vranizan K, Stewart AL. Primary care and receipt of preventive services. *J Gen Intern Med.* 1996;11:269-276.
5. Health insurance coverage and receipt of preventive health services — United States, 1993. *MMWR Morbidity and Mortality Weekly Report.* 1995;44:219-225.
6. Needleman J, Arnold J, Sheila J, Lewin LS. The Health Care Financing System and the Uninsured. Washington, DC: Lewin/ICF, 1990.
7. Shoen C, Lyons B, Rowland D, Davis K, Puleo E. Insurance matters for low-income adults: results from a five-state survey. *Health Affairs.* 1997;16:163-171.
8. Weber RP. Basic Content Analysis. Beverly Hills, CA: Sage, 1985.

"Fear and Loathing at Fifty"

Every eight seconds, another Boomer Baby is turning 50 years old. My turn came round last year, attended by the customary well-wishers at my birthday party inflicting upon me the requisite assortment of laxatives, hemorrhoidal preparations, stool softeners, adult diapers, and impotence aids. Truth be told, some of these have actually turned out to be quite useful. Nonetheless, subsequent moments of fretful reflection upon my first half century of life allowed me several profound insights which I will share with you. Indeed, I now envision myself much in the manner of an ancient Colossus astride the Harbor of Time, one foot firmly planted on the shore's edge of the Twentieth Century, the other foot tentatively seeking out firm ground in the coming century, the icy winds of change blowing fiercely between my fluttering britches.

Consider that in the year I was born, Harry Truman was President, Uncle Joe Stalin held firm sway over the Evil Empire, Mahatma Gandhi was spinning his wheels and Israel was not yet a state. Computers, such as they were, required the size of a warehouse, space travel was science fiction, transistors were non-existent. Orville Wright (yes, *the* Orville Wright) was alive as was Al Capone (yes, *the* Al Capone). Jackie Robinson just broke the color barrier, no one yet broke the sound barrier and Babe Ruth was still swinging. Polio vaccines, open heart surgery, organ transplantation, and the DNA code all awaited discovery. Fifty years later, I can't surf the Internet without falling off nor program my VCR.

So here I humbly offer some observations that may aid others skirting middle-age to determine if the clammy fingers of 50 are clutching at the hems of their white coats. To wit, you may find yourself turning 50 if:

- Everything hurts.
- You're stiff in all the wrong places.
- You're thinking you never looked that young when you were a medical student.
- You ask your medical students to find laboratory data for you on the computer.
- You are grateful when people you know and work with daily wear their name tags.
- You mill about the parking lot every night in bewilderment trying to remember where you parked your car.
- You wait for the elevator to go up or go down one flight of stairs.
- Your locker becomes progressively crammed with aspirins, ibuprofen, and antacids.
- You shake the hand of a regular patient of yours in the office and tell them how nice it is to meet them.
- You see a patient in follow up in your office a week later and, for the life of you, can't remember what operation you did on them.
- Your nurse has to give you a list of appointments and instructions each morning, lest you wander aimlessly down long hallways lost and hungry.
- More and more, journal articles seem to be reinventing the wheel.
- Your scrub clothes seem to be shrinking.
- You perform procedures with swiftness and efficiency not so much because of your experience but because you have to go to the bathroom.
- You forget to zip up.
- Worse, you forget to zip down.
- You become increasingly preoccupied with your bowel movements.
- You find yourself wearing magnifying loops for every surgical procedure.
- You play music in the operating room of bands that were popular before your resident was ever born.
- Worse, you play music in the operating room of bands, most of whose members were *dead* before your resident was ever born.
- You catch yourself saying, "in my day when I was a resident . . ." or, "I remember when . . ."
- Your patients ask if those nice pictures of the wife and kids on your desk are those of your daughter and grandchildren.
- Finally, you find yourself sitting in the emergency room at 2:30 a.m. with the discomfiting and unwelcome thought seeping into your foggy brainpan, "What in the blazes am I doing here and why? . . ."

Well, as my spiritual guru from the eighties, Ronald Reagan, once said, (to paraphrase), "I just reached 50—but remember, folks, that's only 10 celsius."

Jaroslav P. Stulc, MD

I Am 75 Years Old. I Am Medicine's Best Friend. Who Am I?

My birth occurred in 1923 in Crab Orchard, Kentucky, where thousands of Kentuckians had migrated starting back in 1775. It was an inauspicious event, barely noticed, and there was no TV coverage. Even though the bells did not chime and the air waves did not hum, my effect on the field of medicine would grow and grow and grow. Without the help of Dr Arthur T. McCormack, my birth probably would have been greatly delayed, but I would have been born sometime. Because, you see, I was needed. The medical profession was having a tough time in those days and something needed to be done to counter the adverse publicity that was impugning the image of medicine. (*Can you guess who I am?*)

I became a twinkle in the eye of Dr McCormack, who was Secretary of the Kentucky State Medical Association, after he learned from a colleague, Dr Holman Taylor, MD, Secretary of the Texas State Medical Association, about the organized efforts of "Doctors' Wives" in Texas to help protect their husbands' integrity amid the recent invasion of "Medical Charlatans" in their state. Dr McCormack was inspired by what was happening in Texas and felt the same was needed in Kentucky. The prospect for my birth was established when The Kentucky State Medical Association Council approved Dr McCormack's recommendation to help organize the "Doctors' Wives" at their annual meeting in 1921. In May 1922, Dr McCormack was further inspired when he heard Mrs S.C. Red, the first President of the Texas Auxiliary, speak at the AMA House of Delegates meeting where she challenged the doctors in attendance to help her organize a national organization for "Doctors' Wives." Dr McCormack was impressed with Mrs Red's presentation and was confident his dear Kentucky would be receptive to this idea. In the fall of 1922, at the state medical association meeting in Paducah, he appointed a chairman of a committee to consider my birth; however, after much discussion, there was no one present who felt they could undertake such a responsibility at that time. The seed had been planted, however, and with time to grow amid much consideration and discussion about the endeavor, the following year I was born. (*Enough hints yet?*)

My name has changed over the years; however, my dedication has never wavered. Oh yes, my face has changed also. I am no longer only an organization of "wives" because now it

appears that about 40% of my future make up will be males. My commitment has been most admirable, if I do say so myself. As early as 1930 I had initiated a weekly radio program called "Radio Waves," to discuss good health practices. Over the years I have publicized multiple public health hazards, fought for better access to health care, distributed information about teen pregnancy, assisted in public vaccination and school health programs, raised funds for medical research and education, and been active in the political arena. So you see, I've had a long and productive life, and I'm still growing. Some goals I hope to accomplish this year are to reach approximately 100,000 teachers and school staff throughout the public school system with breast cancer awareness information and a reminder to get mammograms; to reach approximately 200,000 school children, kindergarten through 3rd grade, throughout the state with anti-violence materials teaching children how to handle conflict without violence; to get more people trained and expand the SMART (Students Made Aware Reject Tobacco) program and thereby teach as many children as possible about making responsible choices and the hazards of smoking; to endow scholarship funds at both the UK and UL medical schools; become better educated in how to participate effectively in the legislative process; and last but not least, I want to have a presence in more counties and become better organized. Whew! Makes an older one like myself almost gasp for breath, but it can be done if all the parts work well together. It almost makes me feel born again to be able to use the lessons of the past to create a brighter future.

Who am I? I am the KMA Alliance! The medical profession's best friend.

I celebrated my 75th birthday at the spring convention in Madisonville in April. Dr Trover, who founded the Trover Clinic that changed the face of medicine in that part of Western Kentucky, was one of the special guests present for the celebration and was the guest speaker. The huge birthday cake was enjoyed by all. Hopkins County sure knows how to throw a party!

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Special Committee Chairmen

Annual Convention	Joyce Clark (Danny)	Somerset
Annual Reports	Maggie Becker (Philip)	Villa Hills

Special Committee Chairmen (continued)

Day at the Capitol	Angie DeWeese (Bob)	Louisville
Fall Board	Donna Kruger (Willem)	Louisville
Volunteer Hours	Terri Hudepohl (Robert)	Lakeside Park
Winter Board	Cheryl VanDaalen (James)	Louisville

County Presidents

Boyd	Becky Staten (Ronald)	Ashland
Daviess	Mimi Davis (Brett)	Owensboro
Fayette	Debbie Adkins (J. Thomas)	Lexington
Henderson	Anita Watkins (Scott)	Henderson
Hopkins	Dr Laura Garcia (Hector)	Madisonville
Jefferson	Dianne Cox (Warren)	Louisville
Madison	Ellen Kessler (Kent)	Richmond
McCracken	Holly Locken (Peter)	Paducah
Northern Kentucky	Connie Combs (James)	Burlington
Perry	to be announced	
Pulaski	Cheri Gomez (Ed)	Somerset
	Melissa Huffman (Mark)	Somerset
Warren	Tammy Bergamini (David)	Bowling Green

A very special recognition goes to each of these board members for their commitment to the Alliance during this *diamond anniversary* year and particularly a special thanks to you physicians who recognize the importance of the role of the Alliance and are so supportive of your spouses participation in this organization. The Alliance has a very rich history in both this Commonwealth and the Nation and is truly Medicine's best friend.

Jan Crase
KMAA President

Special thanks to Gloria Griffin for her 75th Anniversary research & information.

Board of Trustees Spring Board Meeting

Top: Secretary-Treasurer William P. VonderHaar, MD, is pictured at the podium. L to R are Vice Board Chair Donald R. Neel, MD; Vice President Harry W. Carloss, MD; President C. Kenneth Peters, MD; Board Chair J. Gregory Cooper, MD; and President-Elect Donald R. Stephens, MD. Bottom: Three KMA Past Presidents studied the Board reports. L to R are AMA Delegate and State Legislative Activities Chair Wally O. Montgomery, MD; AMA Senior Delegate and National Legislative Activities Chair Donald C. Barton, MD; and Alternate AMA Delegate and Public Education Committee Chair Preston P. Nunnelley, MD.

The KMA Board of Trustees met in regular session on April 8-9, 1998, at the KMA Building in Louisville. Board members heard reports from the President; Secretary-Treasurer; Board of Medical Licensure; Chair, KEMPAC Board of Directors; Senior Delegate to the AMA; Chair, Kentucky Medical Insurance Company Board of Directors; President, KMA Alliance; and the Commissioner, Department for Public Health.

The Board adopted the budget for fiscal year 1998-99. In further action, the Board approved the nominees for reelection to the KMIC Board of Directors; selected nominees to the Breast Cancer Advisory Committee and the Breast Cancer Task Force; and reappointed the KMA/KMIC Board Joint Advisory Committee.

The Board adopted the recommendation of the Committee on Insurance and Prepayment Plans to collect information from members on the shifting of administrative burdens and costs by insurance companies to physicians. The Board also approved a survey of International Medical Graduates in Kentucky to determine unmet needs. In further action, the Board authorized KMA to allow credit card payments for dues and other KMA resources.

Additional reports were given by the Committee on Medicaid Managed Care, the Committee on National Legislative Activities, the Committee on State Legislative Activities, the Public Education Committee, and the Committee on Child and School Health.

The Board also heard information on HCFA Evaluation and Management Guidelines, web page development status, Fraud and Abuse Seminars, and Regional Trustee District meetings.

It was noted that the theme for the 1998 Annual Meeting is "The Team Approach to Healthcare: The Physician's Role," and that Nancy Dickey, MD, AMA President Elect, has been invited to attend dinner with the Board on Sunday evening and to address the House of Delegates on Monday.

The KMA Board of Trustees will hold its next regular meeting on August 5-6, 1998, at the KMA Building.

PEOPLE

Arnold M. Belker, MD, Louisville, recently was honored to present the inaugural Quinby Lecture on Male Reproduction at Harvard University.

Dr Belker actually presented two lectures—one entitled "Sperm Retrieval Techniques for IVF/ICSI," at Massachusetts General Hospital, and "Reproductive Microsurgery for the Urologist," at Brigham and Women's Hospital.

Doctor Belker has achieved a national and international reputation as an outstanding microsurgeon and one of the leaders in the field of andrology and male reproduction. He has served as President of the Kentucky Urological Association, the American Society of Andrology, the Society of Reproductive Surgeons, and the Society for the Study of Male Reproduction. He has also been the President of the University of Louisville Medical School Board of Governors.

Richard J. Glassock, MD, Lexington, has been named a Master of the American College of Physicians. The College conferred mastership, its highest level of membership, upon 39 College fellows in an April convocation ceremony at its 79th Annual Session.

According to ACP bylaws, masters are elected "for their personal character, positions of honor or influence, contributions toward furthering the purposes of the College, and/or eminence in practice or in medical research." The American College of Physicians is the nation's largest medical specialty organization.

Scott B. Scutchfield, MD, Danville, has been named chairman of the Board of Councilors of the American Academy of Orthopaedic Surgeons. He has served as Kentucky's representative on the board since 1993.

Dr Scutchfield is a member of the board of directors of the American Academy of Orthopaedic Surgeons and is the regional representative for the Orthopaedic Research and Education Foundation. He has been chairman of the Kentucky Orthopaedic Political Action Committee since 1994 and is on the executive committee of the Kentucky Orthopaedic Association.

Dr Scutchfield is in private practice and serves on the staff of Ephraim McDowell Regional Medical Center in Danville. He is an assistant clinical professor, department of orthopaedic surgery, University of Kentucky College of Medicine.

UPDATES

Viagra Receives FDA Approval

Pfizer Inc has announced FDA approval of the oral therapy Viagra (sildenafil citrate) for the treatment of erectile dysfunction. According to Pfizer, Viagra is effective in most men with erectile dysfunction (ED) which is associated with a broad range of physical or psychological medical conditions.

Discovered and developed by Pfizer, Viagra is the first in a new class of medications known as phosphodiesterase type 5 inhibitors. Pfizer states that in clinical trials, which included men with a broad range of conditions associated with ED including high blood pressure, high cholesterol levels, diabetes, and prostate surgery, Viagra was shown to be effective in approximately 7 out of 10 men overall. Common side effects noted in the report were headache, facial flushing, and indigestion. Pfizer cautions that Viagra should not be used by patients taking nitrates in any form, including the heart medicine, nitroglycerin.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Boyd

Joseph B Touma MD — OTO
1616 13th Avenue Ste 100, Huntington 25701-1692
1963, Damacus U, Syria

Christian

Paul K Herrell MD — OPH
205 W 15th St, Hopkinsville 42240
1992, U of Louisville

Fayette

Tony W Dotson DO — OBG
4745 Hartland Pkwy, Lexington 40509
1997, Chicago Homeopathic

Hardin

Syedkashif B Haider MD — GE
1107 Woodland Dr Ste 104, Elizabethtown 42701
1989, King Edward Med, Pakistan

James Patrick Murphy MD — AN
705 Westport Rd Ste 105, Elizabethtown 42701
1985, U of Louisville

Jefferson

Richard H Chryn MD — AN
3903 Norbourne Blvd, Louisville 40207-3803
1962, U of Pennsylvania

Mary T Coleman MD — FP
6808 Fallen Leaf Cir, Louisville 40241
1981, Ohio State, Columbus

Andrew L DeGruccio MD — ORS
6702 Kingslook Ct, Louisville 40207
1992, U of S California

Andrew M Donovan MD — PD
497 Kinglan Rd, Louisville 40207
1994, U of Louisville

Lawrence Duvall Jr MD — IM
2404 Hayward, Louisville 40242
1997, U of Louisville

Jorge G Frank MD — ONC
250 E Liberty St Ste 802, Louisville 40202
1972, U of Puerto Rico

Joel Lee Granick MD — ONC
250 E Liberty St Ste 802, Louisville 40202
1972, Brown U, Rhode Island

Thomas M Moriarty MD — NS
210 E Gray St Ste 1105, Louisville 40202
1991, Mt Sinai

Ignacio Montes MD — ONC
4003 Kresge Wy Ste 111, Louisville 40207
1980, Universidad de Caldas, Columbia

Joel L Shanklin MD — PS
2106 Edgeland Ave Apt 1, Louisville 40204
1992, U of Louisville

Muhlenberg

Mohammad B Mourad MD — IM
440 Hopkinsville Rd, Greenville 42345
1986, Damascus U, Syria

Pike

Ayman Alibrahim MD — PD
P O Box 2748, Pikeville 41502
1986, Aleppo U, Syria

Rowan

Kimberly D Williams MD — EM
222 Medical Cir, Morehead 40351
1985, U of Kentucky

IN TRAINING

Jefferson

Nison I Abayev MD — FP
Marlene Villafuerte Chua MD— AN
Michelle D Collins MD — PD
Eugene M Link MD — FP
Brent Allen Madison MD — PD
Matthew Lane Offutt MD —PD
Sujittra Tongprasert MD — AN
Robert Joseph Wasson MD — EM

DEATHS

James B. Jones, Jr, MD
Lexington
1922-1998

James B. Jones, Jr, MD, a retired OB/GYN, died February 26, 1998. Dr Jones graduated from the University of Tennessee College of Medicine in 1949 and was a life member of KMA.

Russell S. Long, MD
Frankfort
1923-1998

Russell S. Long, MD, a retired general practitioner, died March 16, 1998. A 1956 graduate of the University of Louisville School of Medicine, Dr Long was a life member of KMA.

Walter M. Shelly, MD
Hazard
1933-1998

Walter M. Shelly, MD, a thoracic surgeon, died March 20, 1998. A 1959 graduate of Jefferson Medical College of Thomas Jefferson, Dr Shelly was an active member of KMA.

E. Philip Crawford, MD
Lexington
1931-1998

E. Philip Crawford, MD, a retired anesthesiologist, died April 1, 1998. A 1955 graduate of the University of Louisville School of Medicine, Dr Crawford was a life member of KMA.

James S. Golden, MD
Pineville
1922-1998

James S. Golden, MD, a retired general practitioner, died April 25, 1998. Dr Golden was a 1948 graduate of the University of Virginia School of Medicine. He was an artist, well-known for the figurines he made, and his works were featured in *National Geographic World* magazine and other mediums. Dr Golden was a life member of KMA.

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